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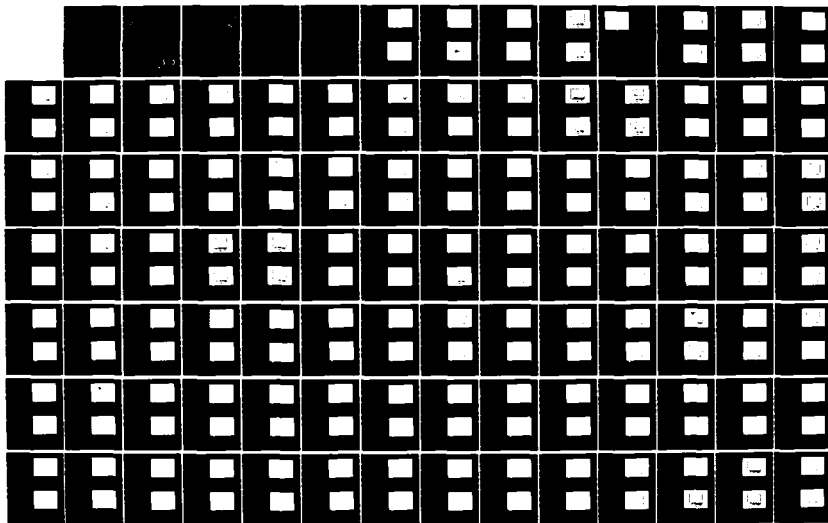
ELECTROMAGNETIC PULSE/TRANSIENT THREAT TESTING OF  
PROTECTION DEVICES FOR. (U) ELECTROSPACE SYSTEMS INC  
ARLINGTON VA D BODSON ET AL. 31 OCT 85

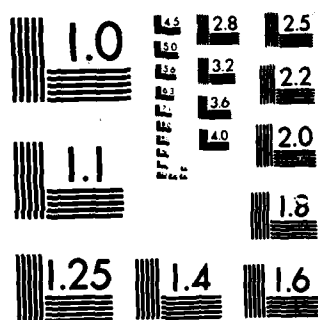
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NCS-TIB-85-10-VOL-3-SEC-4 DCA100-85-C-0010 F/G 20/14

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MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

2

NCS TIB 85-10



# NATIONAL COMMUNICATIONS SYSTEM

VOLUME III

TEST DATA

ELECTROMAGNETIC PULSE TESTING  
OF PROTECTION DEVICES

SECTION 4

LOW IMPEDANCE/LOW VOLTAGE  
TEST

5 OHMS - 600 VOLTS - 120 AMPS

AD-A164 435

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OCTOBER 1985

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# REPORT DOCUMENTATION PAGE

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2a SECURITY CLASSIFICATION AUTHORITY			3 DISTRIBUTION AVAILABILITY OF REPORT <b>Approved for public release distribution unlimited</b>		
2b DECLASSIFICATION/DOWNGRADING SCHEDULE					
4 PERFORMING ORGANIZATION REPORT NUMBER(S) <b>NCS TIB 85-10, Vol. III, Section 4</b>			5 MONITORING ORGANIZATION REPORT NUMBER(S)		
6a NAME OF PERFORMING ORGANIZATION <b>Electrospace Systems, Inc.</b>		6b OFFICE SYMBOL (if applicable)		7a NAME OF MONITORING ORGANIZATION <b>National Communications System Technology &amp; Standards</b>	
6c ADDRESS (City, State, and ZIP Code) <b>1725 S. Jefferson Davis Hwy., Suite 501 Arlington, VA 22202-0668</b>				7b ADDRESS (City, State, and ZIP Code) <b>Washington, D.C. 20305-2010</b>	
8a NAME OF FUNDING/SPONSORING ORGANIZATION <b>National Communications System</b>		8b OFFICE SYMBOL (if applicable) <b>NCS-TS</b>		9 PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER <b>DCA100-85-C-0010</b>	
8c ADDRESS (City, State, and ZIP Code) <b>Washington, D.C. 20305-2010</b>		10 SOURCE OF FUNDING NUMBERS			
		PROGRAM ELEMENT NO <b>33127K</b>		TASK NO <b>D1.6</b>	WORK UNIT ACCESSION NO <b>ORDL D008</b>
11 TITLE (Include Security Classification) <i>Volume III</i> <b>Electromagnetic Pulse Transient Threat Testing of Protection Devices for Amateur Military Affiliate Radio System Equipment (U) Section 4, Low Impedance Line Voltage Test 50Nms-6w 60Hz-120</b>					
12 PERSONAL AUTHOR(S) <b>Dennis Bodson, NCS; Joseph Frizzell and Thomas Higdon (ESI); Walter Rabke (Consultant)</b>					
13a TYPE OF REPORT <b>Technical</b>		13b TIME COVERED FROM TO		14 DATE OF REPORT (Year, Month, Day) <b>1985, October, 31</b>	
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17 COSATI CODES			18 SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP	Amateur Radio Equipment EMP, Lightning Protection, Electro-magnetic Pulse (EMP) Protection Devices Test, EMP, Lightning, Transient Electrical/Magnetic Pulses. 4		
19 ABSTRACT (Continue on reverse if necessary and identify by block number) This technical report discusses the vulnerability of equipment used by amateur/MARS radio operators in the United States to disruption or damage by transient electromagnetic effects such as lightning, voltage surges, and electromagnetic pulse (EMP) waves. It also reports the results of two test programs; one to evaluate existing transient suppression devices and components, and one to evaluate the response of amateur radio equipment to an EMP transient environment.  Based on the test results, the report recommends procedures and a low-cost installation scheme which will significantly increase the operational survivability of amateur type communications equipment in a lightning or EMP environment.  This report consists of three volumes. - Volume I (200 pages) contains the test results and recommendations for transient protection of amateur radio equipment. Volume II					
20 DISTRIBUTION AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS			21 ABSTRACT SECURITY CLASSIFICATION <b>Unclassified</b>		
22a NAME OF RESPONSIBLE INDIVIDUAL <b>Dennis Bodson</b>			22b TELEPHONE (Include Area Code) <b>(202) 692-2124</b>		22c OFFICE SYMBOL <b>NCS/TS</b>

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Block 19 Continued - ABSTRACT

(136 pages) contains supporting documentation including: the test plans for the two EMP tests, descriptions/specifications of the tested transient suppression devices and the amateur radio equipment, and photographs of the test facilities and test set-ups. Volume III (1298 pages) contains the raw test data in the form of oscilloscope photographs attached to the test data sheets for both test programs, as well as, written test descriptions and bench check measurements from the equipment test program. For most purposes Volume I should provide sufficient information. Volume II would be required to obtain more detailed descriptions of the test programs and tested devices and equipment. Volume III would only be required if a separate analysis of the test data is being made.

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NCS TECHNICAL INFORMATION BULLETIN 65-10

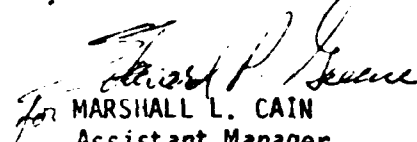
ELECTROMAGNETIC PULSE/TRANSIENT THREAT TESTING OF PROTECTION  
DEVICES FOR AMATEUR/MILITARY AFFILIATE RADIO SYSTEM EQUIPMENT

OCTOBER 1965

PROJECT OFFICER

DENNIS BODSON  
Senior Electronics Engineer  
Office of Technology  
and Standards

: APPROVED FOR PUBLICATION:

  
For MARSHALL L. CAIN  
Assistant Manager  
Office of Technology  
and Standards

FOREWORD

The National Communications System (NCS) is an organization of the Federal government whose membership is comprised of 22 Government entities. Its mission is to assist the President, National Security Council, Office of Science and Technology Policy, and Office of Management and Budget in:

- o The exercise of their wartime and non-wartime emergency functions, and their planning and oversight responsibilities.
- o The coordination of the planning for and provision of National Security/Emergency Preparedness communications for the Federal government under all circumstances including crisis or emergency.

In support of this mission the NCS has executed a Memorandum of Understanding with the American Radio Relay League. Its purpose is to establish a broad framework for a cooperative and close working relationship with volunteer radio amateurs for support of national emergency communications functions. It is intended through joint coordination and exercise of the resources of both organizations, to enhance the nation-wide posture of telecommunications readiness for any conceivable national emergency. This particular Technical Information Bulletin is one of a series aimed at developing an awareness in the radio amateur community of practical, low cost EMP protective procedures, devices, and equipment which may if utilized significantly enhance the probability of amateur radio resources escaping serious damage during emergency situations involving EMP events.

Comments, on this TIB are welcome, and should be addressed to:

Office of the Manager  
National Communications System  
ATTN: NCS-TS  
Washington, DC 20305-2010  
(202) 692-2124

Date **5-21-85**

Test Point **Noise #1**

Amplification **0** dB

Attenuation **0** dB

Horizontal **20** ns/div 1

Vertical **50** mV/div 1

Horizontal ns/div 2

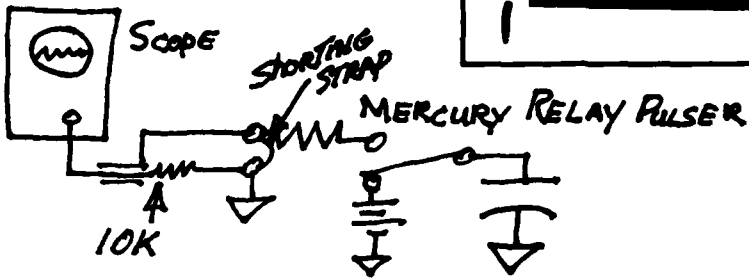
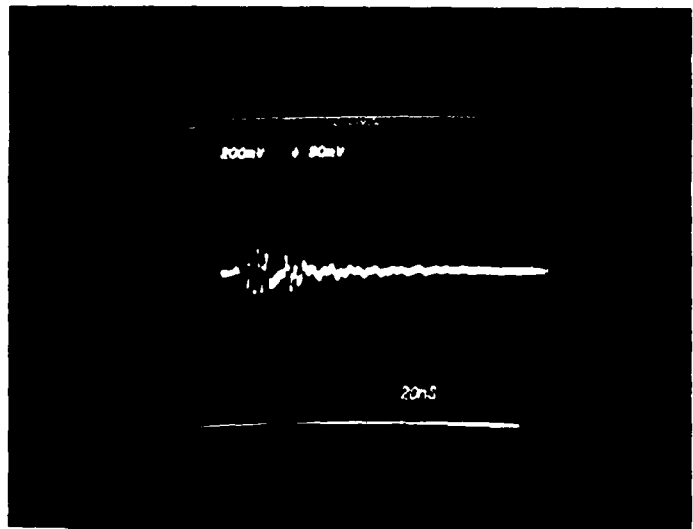
Vertical ns/div 2

Configuration

Pulse Level **50V**

Data Link

Comments:



Date **5-21-85**

Test Point **Noise #2**

Amplification **0** dB

Attenuation **0** dB

Horizontal **20** ns/div 1

Vertical **500** mV/div 1

Horizontal ns/div 2

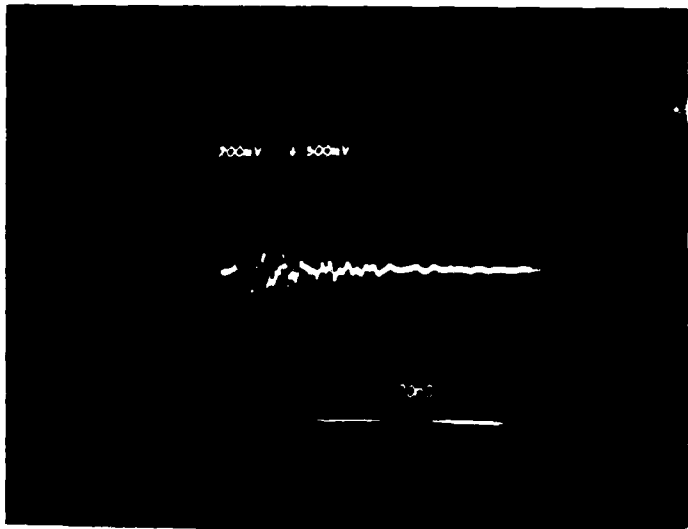
Vertical ns/div 2

Configuration

Pulse Level **500V**

Data Link

Comments:



Date **5-22-85**

Test Point **Noise #3**

Amplification **0** dB

Attenuation **0** dB

Horizontal **20** ns/div 1

Vertical **20** mV/div 1

Horizontal ns/div 2

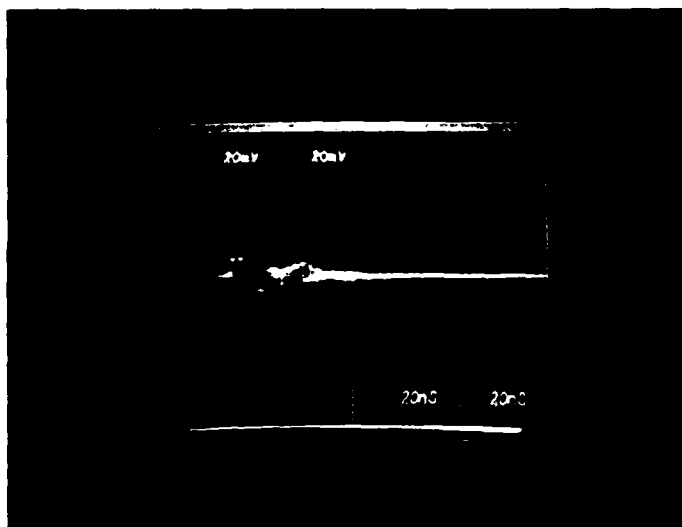
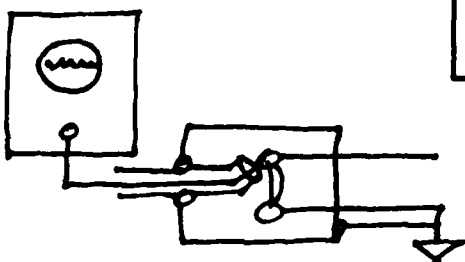
Vertical ns/div 2

Configuration

Pulse Level **500V +**

Data Link

Comments:



Date **5-22-85**

Test Point **Noise #4**

Amplification **0** dB

Attenuation **0** dB

Horizontal **20** ns/div 1

Vertical **20** mV/div 1

Horizontal ns/div 2

Vertical ns/div 2

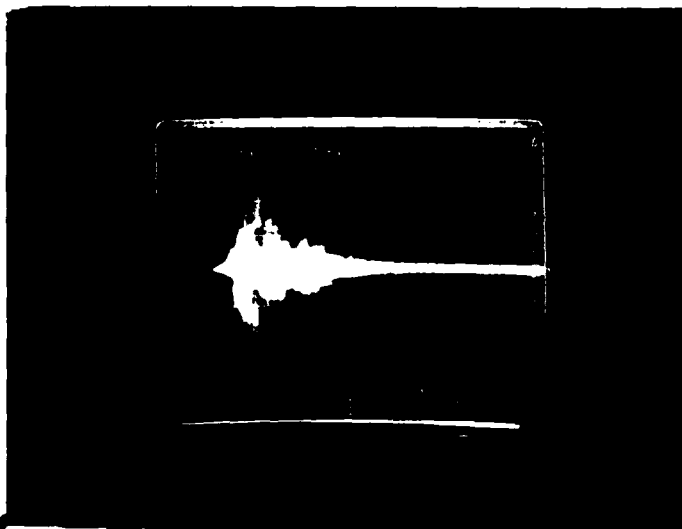
Configuration

Pulse Level **2500V +**

Data Link

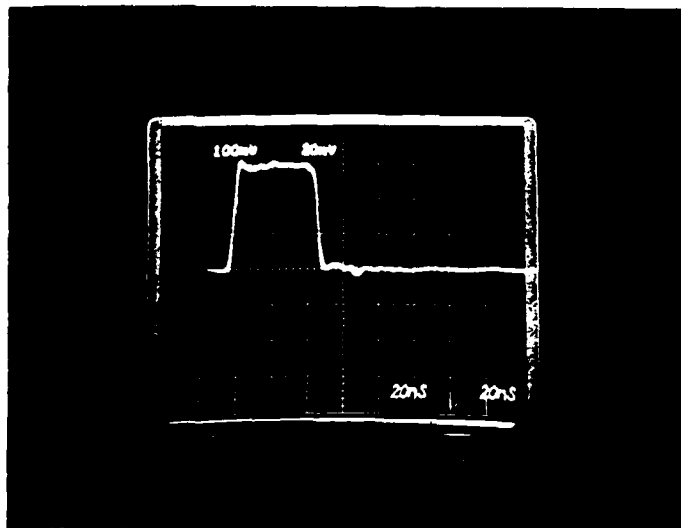
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**SEE #3 FOR  
CIRCUIT**

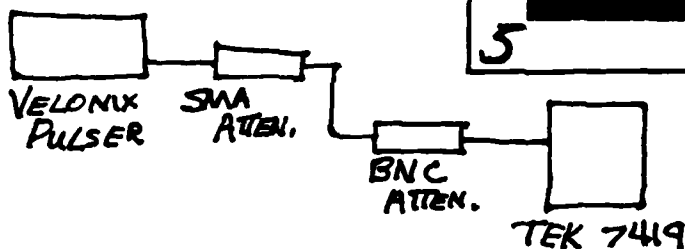




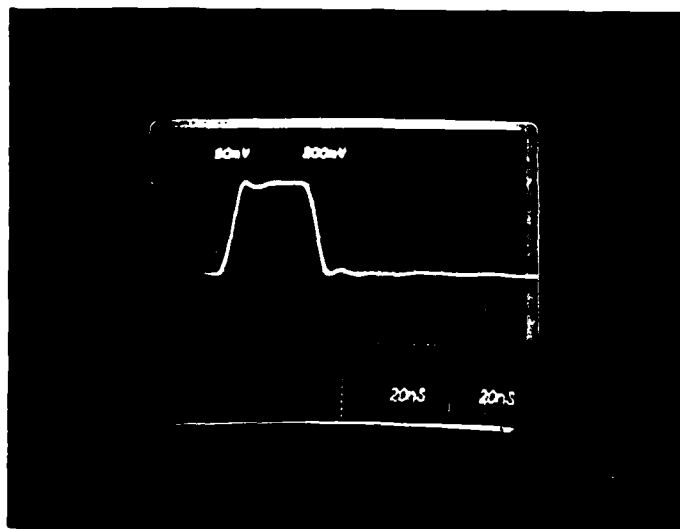
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 Test Point V PROBE CAL  
 Amplification 0 dB  
 Attenuation -40 dB  
 Horizontal 20 ns/div 1  
 Vertical 100 mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level  
 Data Link  
 Comments:



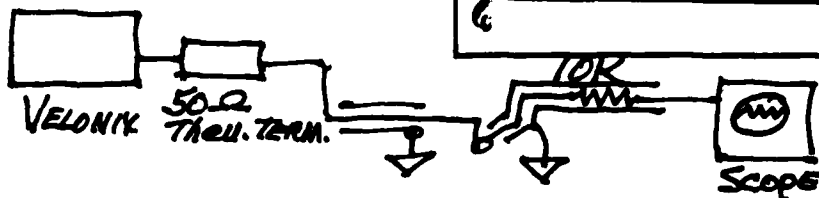
5



Date 5-22-85  
 Test Point V PROBE CAL  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical 50 mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level  
 Data Link  
 Comments:

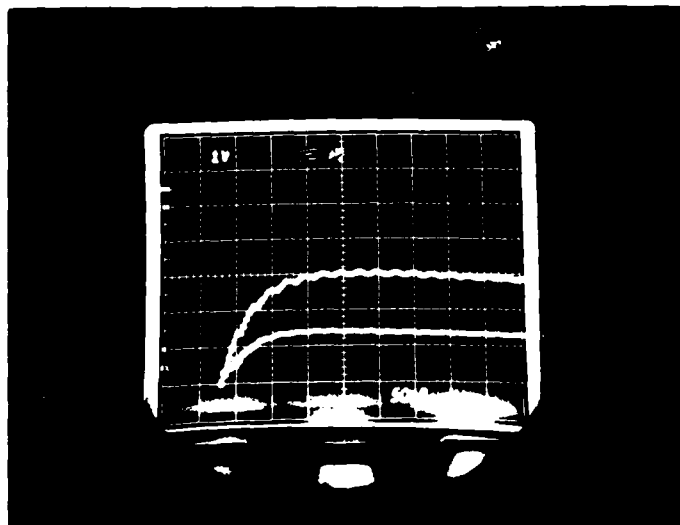


6



Date 5-31-85  
 Test Point 1 - AL - 1/10-φ  
 Amplification dB  
 Attenuation dB  
 Horizontal 50 ns/div 1  
 Vertical 1V(190) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulser Level +600 V  
 Data Link

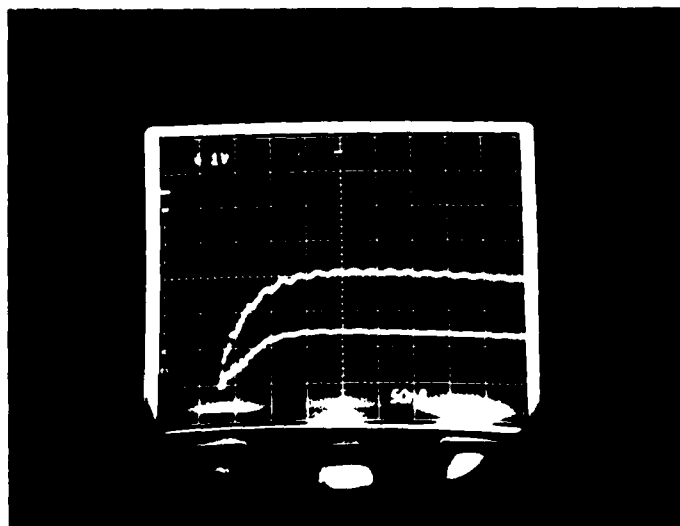
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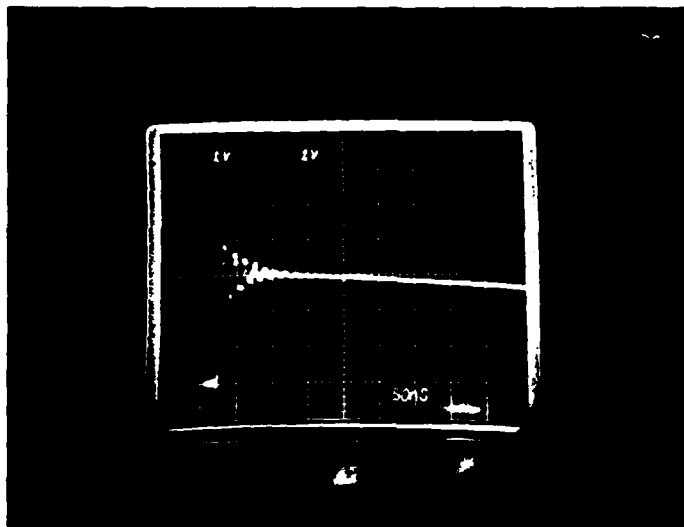
504

Date 5-31-85  
 Test Point 1R - AL - 1/10-φ  
 Amplification dB  
 Attenuation dB  
 Horizontal 50 ns/div 1  
 Vertical 1V(190) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulser Level -600 V  
 Data Link

Comments: 505



505

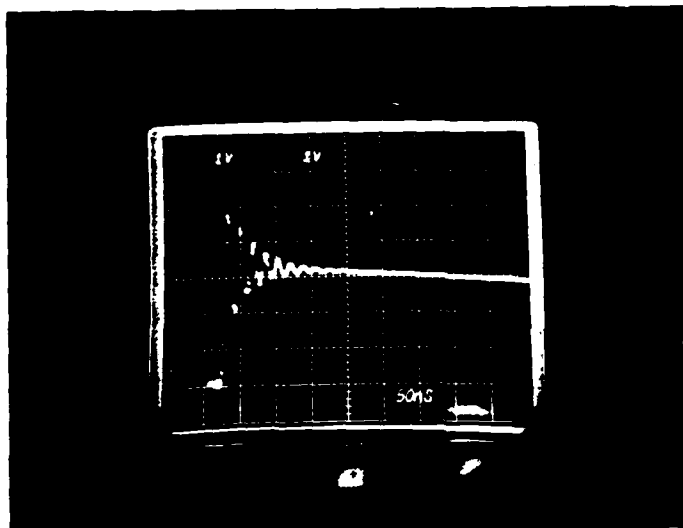


V Ref for 340, 341  
 $\approx 200\text{V/div}$

Date	5-28-85	
Test Point	2-BL-1/10-0	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	1.0V(240V)	mV/div 1
Horizontal	ns/div 2	
Vertical	ns/div 2	
Configuration		
Pulser Level	600V	
Data Link		

Comments:

340

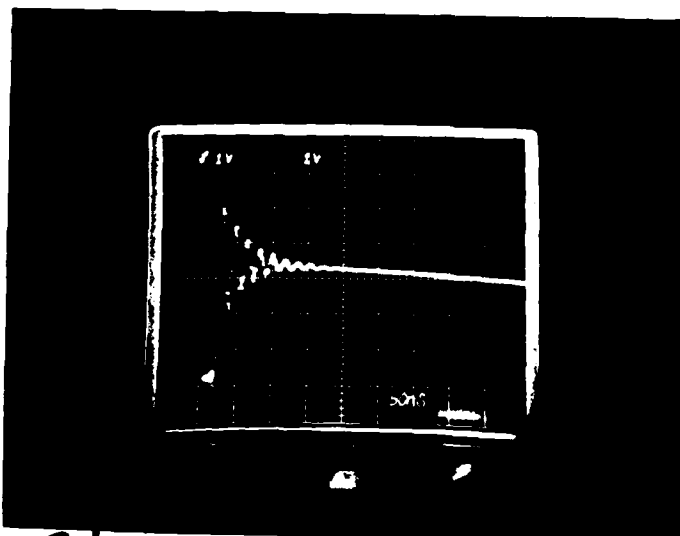


340

Date	5-28-85	
Test Point	2R-BL-1/10-0	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	1.0V(240V)	mV/div 1
Horizontal	ns/div 2	
Vertical	ns/div 2	
Configuration		
Pulser Level	600V	
Data Link		

Comments:

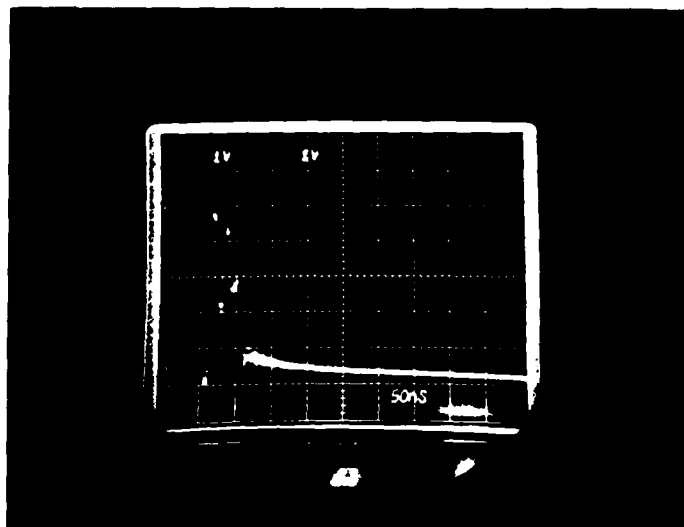
341



341

Date 5-28-85  
 Test Point 3-BL-1/10- $\phi$   
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical 1.0V(240V) ns/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulse Level 600V  
 Data Link  
 Comments:

338

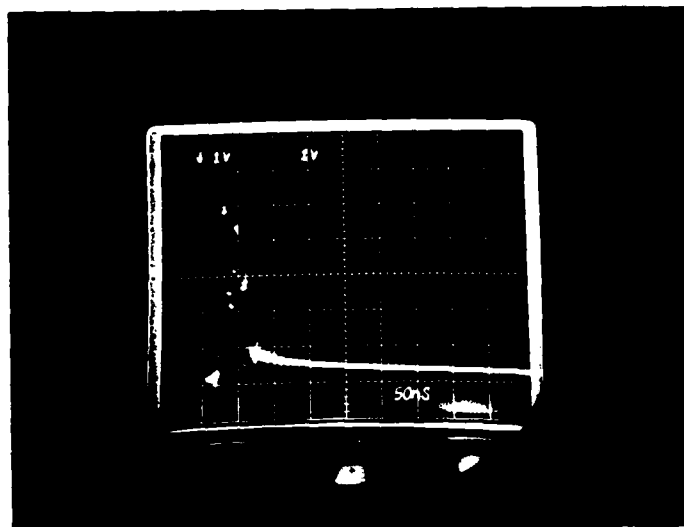


338

\* 120V/div  
 (See note 70-K)

Date 5-28-85  
 Test Point 3R-BL-1/10- $\phi$   
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical 1.0V(240V) ns/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulse Level 600V  
 Data Link  
 Comments:

339



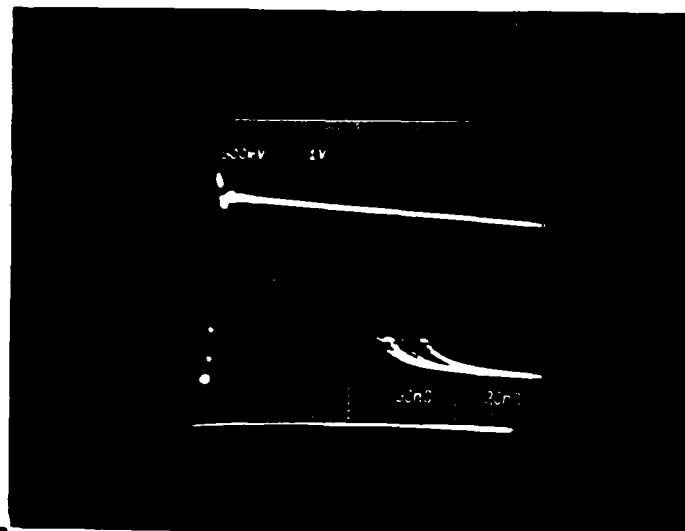
339

\* 120V/div

Date	5-23-85	
Test Point	10-BL-1-10-A	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	.5V (120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		

Comments:

100Ω ACROSS TEST OBJECT  
FOR V. REF

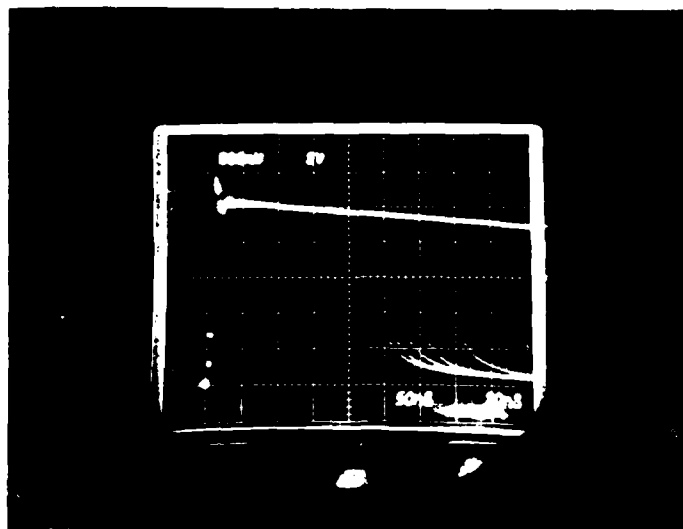


Date		
Test Point	10R-BL-1/10-A	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	.5V (120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		

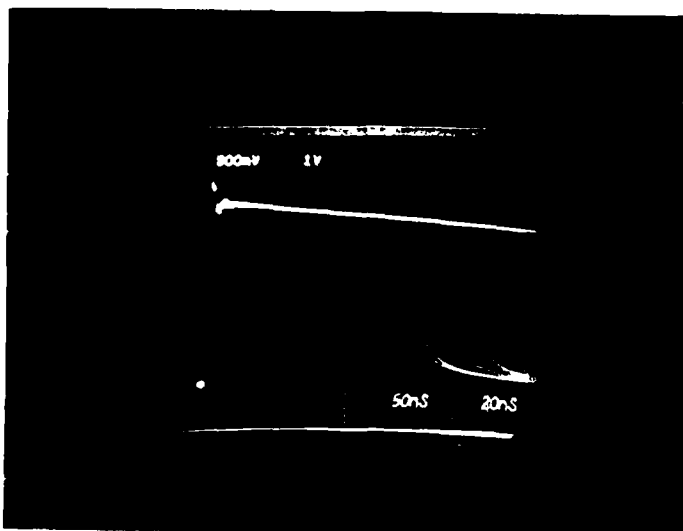
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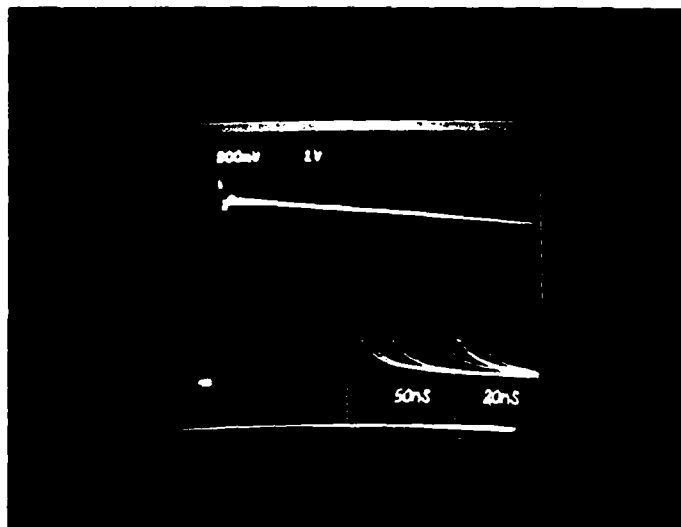
Date	5-23-85	
Test Point	10 BL-1/10-B	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulse Level	600V	
Data Link		
Comments:		



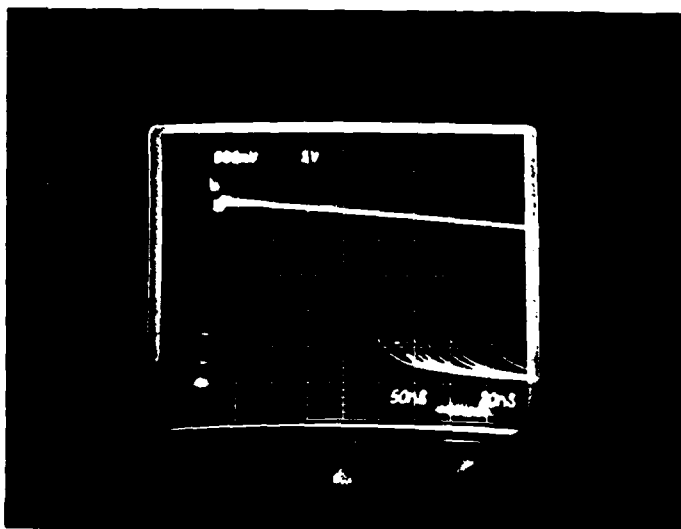
Date	5-23-85	
Test Point		
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulse Level	600	
Data Link		
Comments:		



Date 5-23-85  
 Test Point 10-BL-1/10-C  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

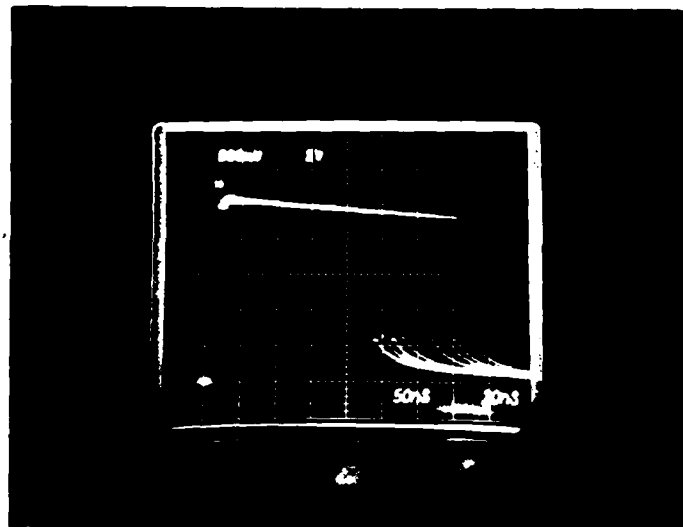


Date 5-23-85  
 Test Point 10R-BL-1/10-C  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

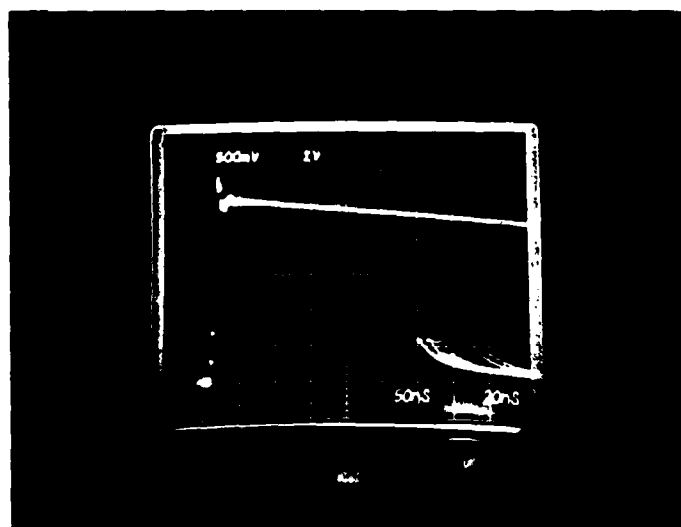




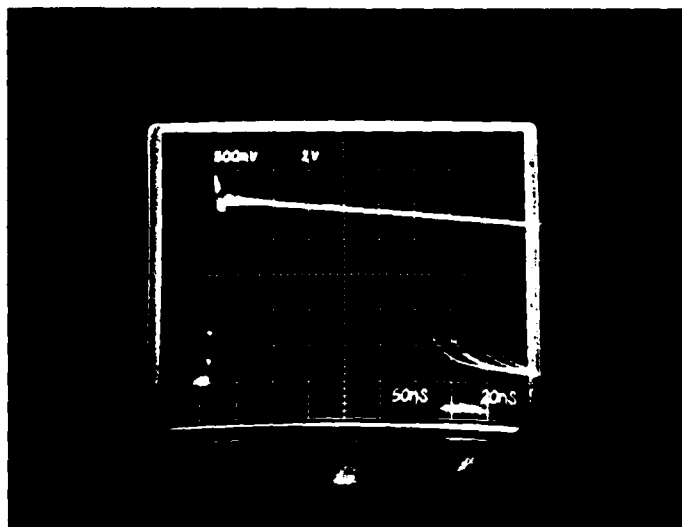
Date	5-23-85		
Test Point	10-BL-1/10-P		
Amplification	0	dB	
Attenuation	0	dB	
Horizontal	50	ns/div	1
Vertical	.5 (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:			



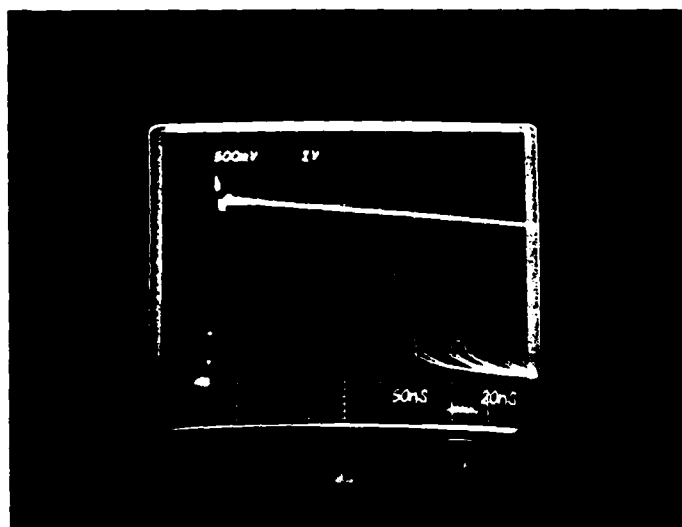
Date			
Test Point	10R-BL-1/10-D		
Amplification	0	dB	
Attenuation	0	dB	
Horizontal	50	ns/div	1
Vertical	.5V (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:			



Date 5-23-85  
 Test Point 10-BL-1/10-E  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:



Date  
 Test Point 10R-BL-1/10-E  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:



Date 5-23-85

Test Point 10-BL-1/10-F

Amplification 0 dB

Attenuation 0 dB

Horizontal 50  $\mu$ s ns/div 1

Vertical .5V (120V) mV/div 1

Horizontal ns/div 2

Vertical ns/div 2

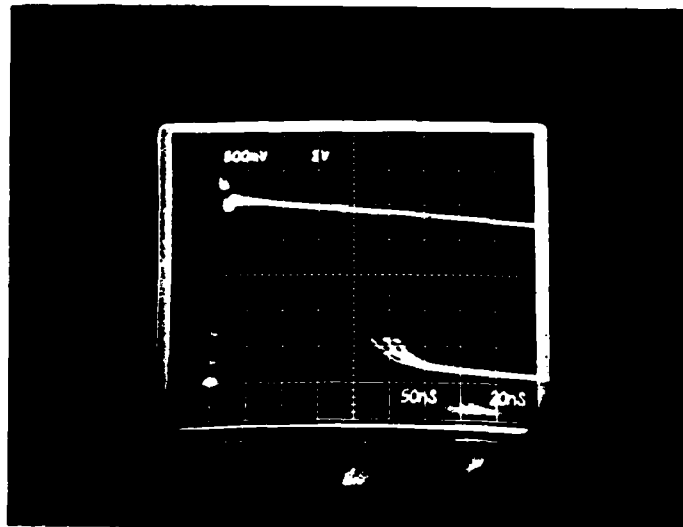
Configuration

Pulser Level 600

Data Link

Comments:

17



Date 5-23-85

Test Point 10R-BL-1/10-F

Amplification 0 dB

Attenuation 0 dB

Horizontal 50  $\mu$ s ns/div 1

Vertical .5 (120V) mV/div 1

Horizontal ns/div 2

Vertical ns/div 2

Configuration

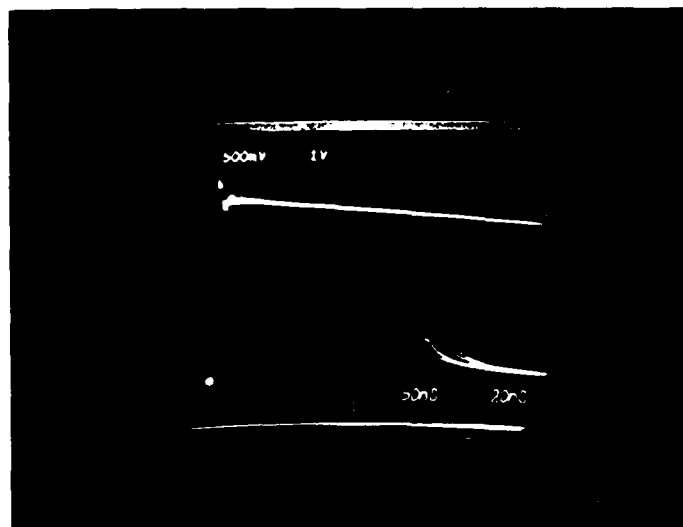
Pulser Level 600V

Data Link

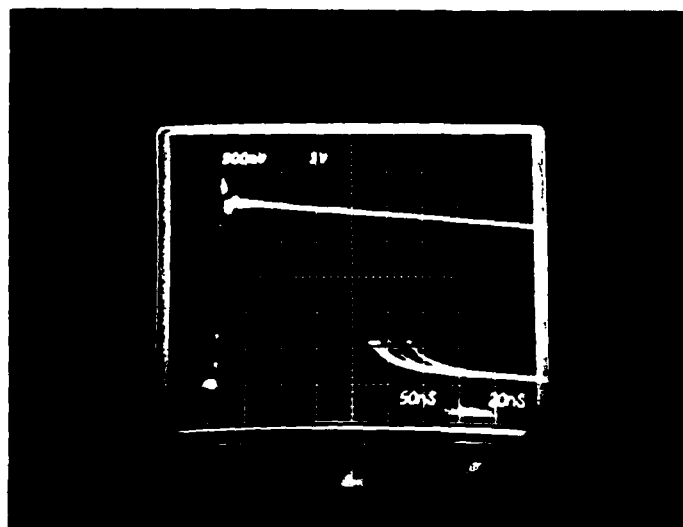
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DID NOT FIRE UNTIL  
~ 300 NS AFTER  
8-9 SHOTS

18

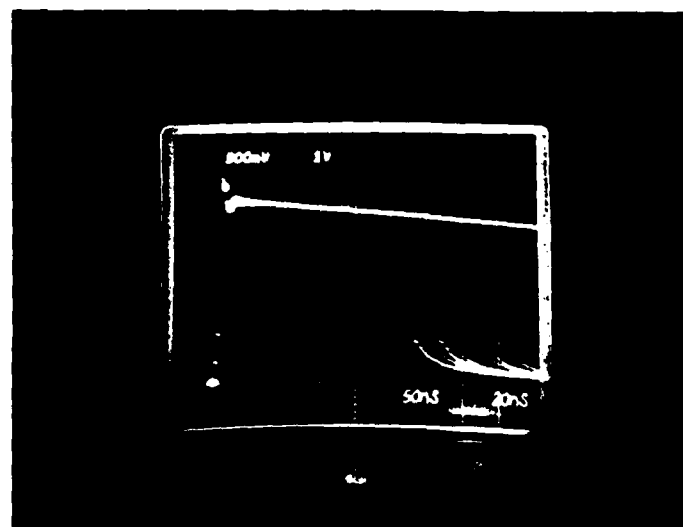


Date	5-23-85		
Test Point	10-BL-1/10-G		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5 (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:			



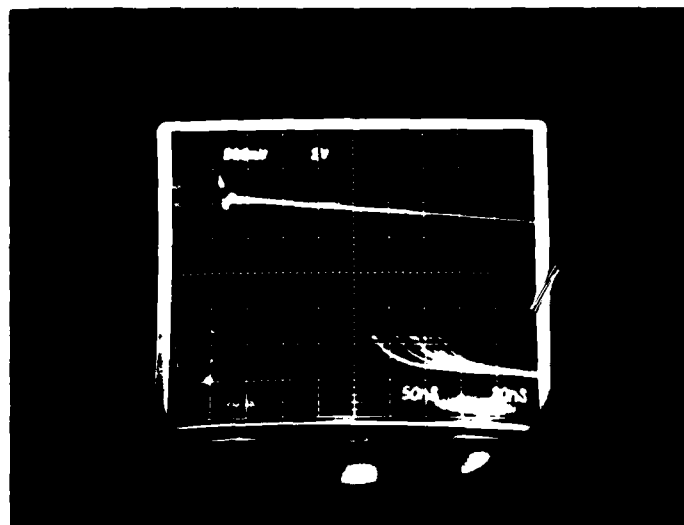
19

Date			
Test Point	DR-BL-1/10-G		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5V (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:			



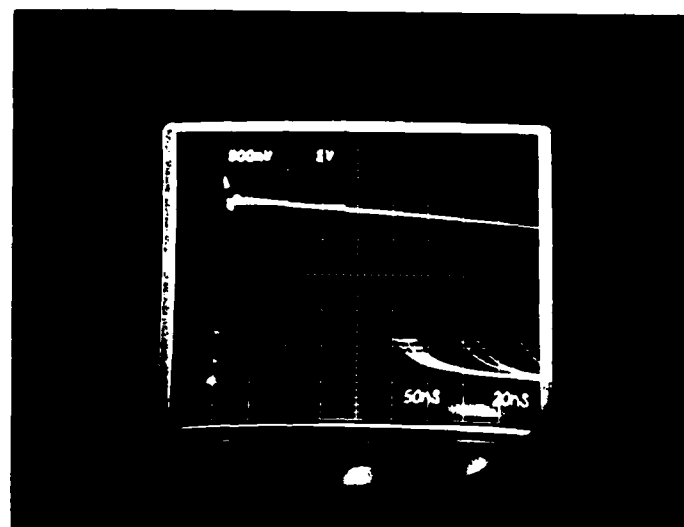
20

Date	5-23-85
Test Point	10-BL-1/10-H
Amplification	0 dB
Attenuation	0 dB
Horizontal	50 ns/div 1
Vertical	.5 (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	



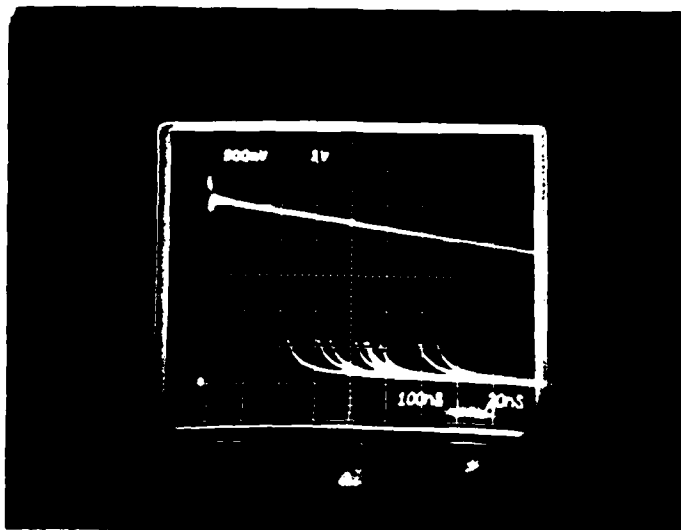
21

Date	5-23-85
Test Point	10R-BL-1/10-H
Amplification	0 dB
Attenuation	0 dB
Horizontal	50 ns/div 1
Vertical	.5 (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	



22

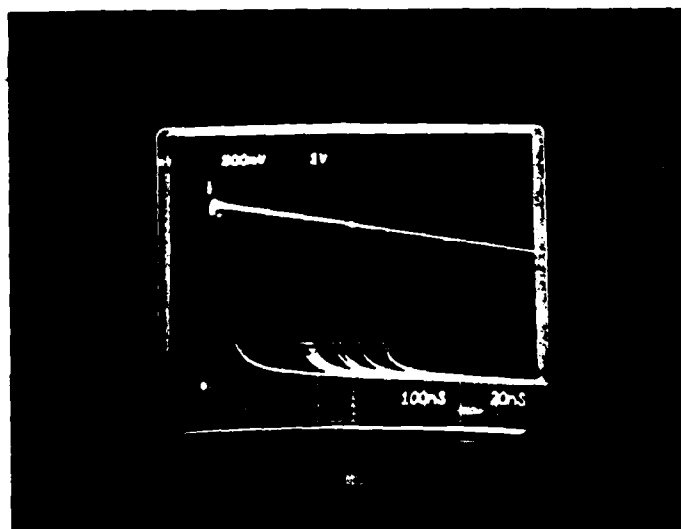
Date	5-23-85
Test Point	10-BL-1/10-I
Amplification	0 dB
Attenuation	0 dB
Horizontal	100 ns/div 1
Vertical	.5 (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	



23

23

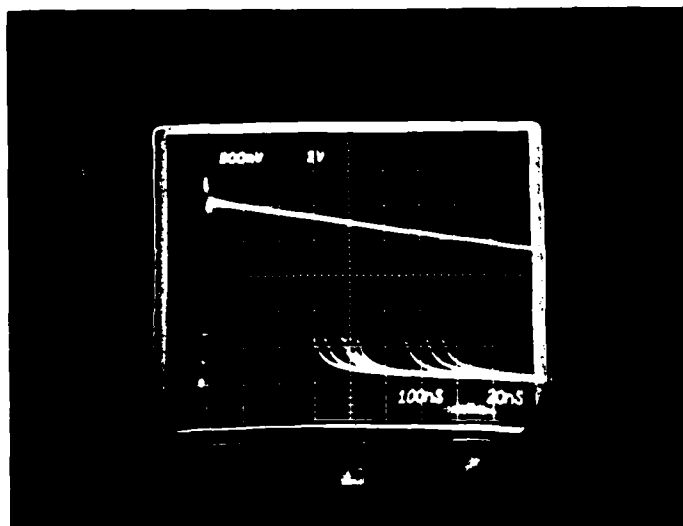
Date	5-23-85
Test Point	10R-BL-1/10-I
Amplification	0 dB
Attenuation	0 dB
Horizontal	100 ns/div 1
Vertical	.5 (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	



24

24

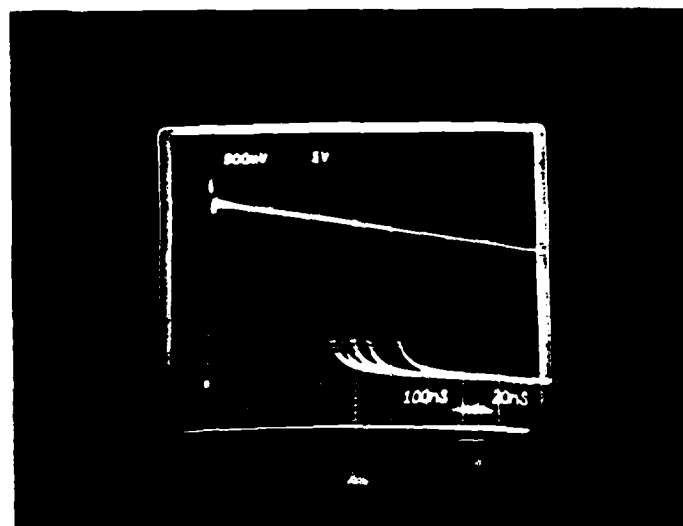
Date	5-23-85		
Test Point	10-BL-1/10-J		
Amplification	0	dB	
Attenuation	0	dB	
Horizontal	100	ns/div	1
Vertical	.5 (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:			



25

25

Date	5-23-85		
Test Point	10R-BL-1/10-J		
Amplification	0	dB	
Attenuation	0	dB	
Horizontal	100	ns/div	1
Vertical	.5 (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:			

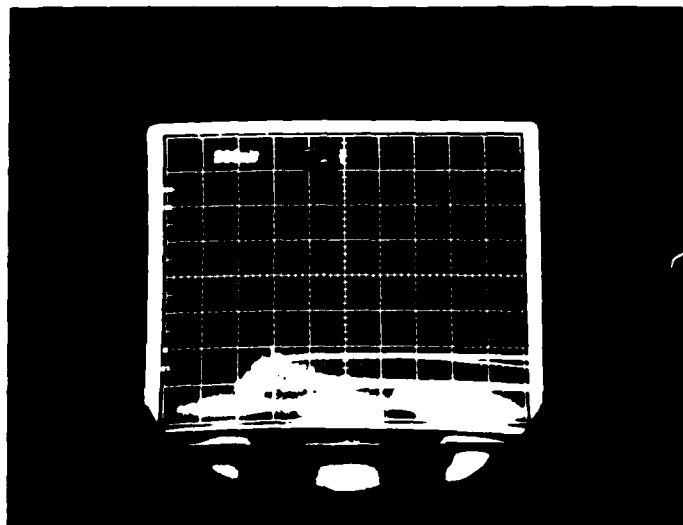


26

26

Date	5-30-85
Test Point	12-AL-1/10-Ø
Amplification	dB
Attenuation	dB
Horizontal	50 ns/div 1
Vertical	.5V(95V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	+600V
Data Link	
Comments:	464

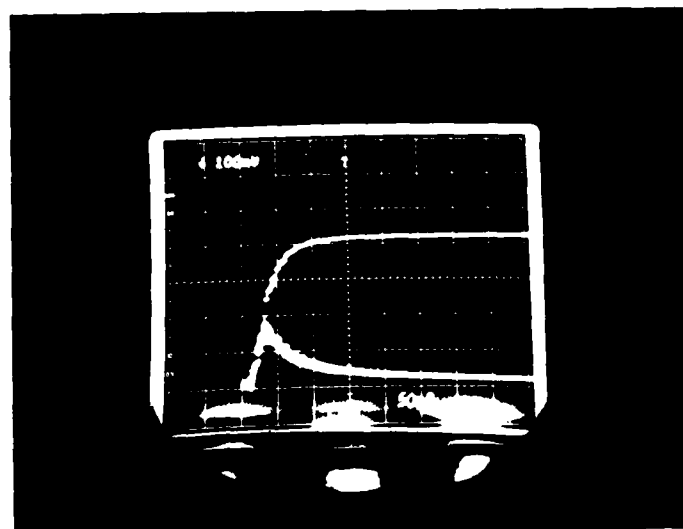
"COMMON LEAD"



464

Date	5-30-85
Test Point	12R-AL-1/10-Ø
Amplification	dB
Attenuation	dB
Horizontal	50 ns/div 1
Vertical	.1V(190V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	-600V
Data Link	
Comments:	465

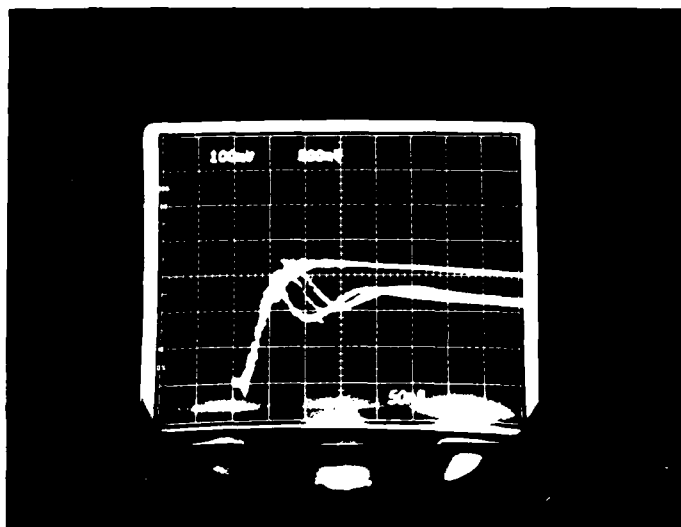
"COMMON LEAD"



465

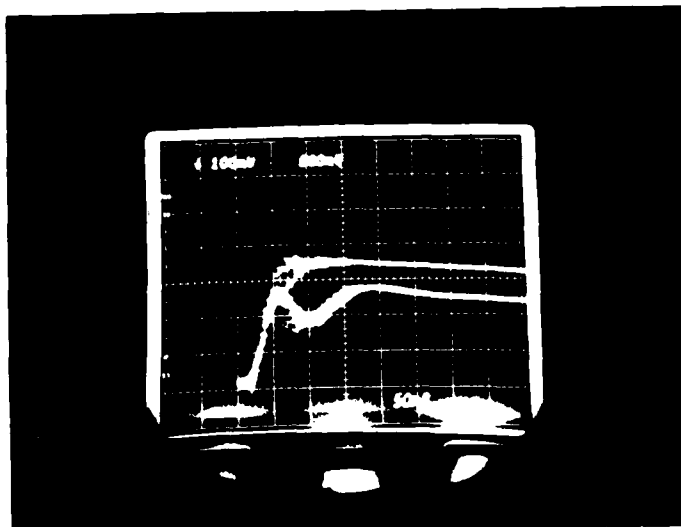


Date	5-30-85
Test Point	12-AL-1/10-Ø
Amplification	dB
Attenuation	dB
Horizontal	50 ns/div 1
Vertical	.1V (190V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	466



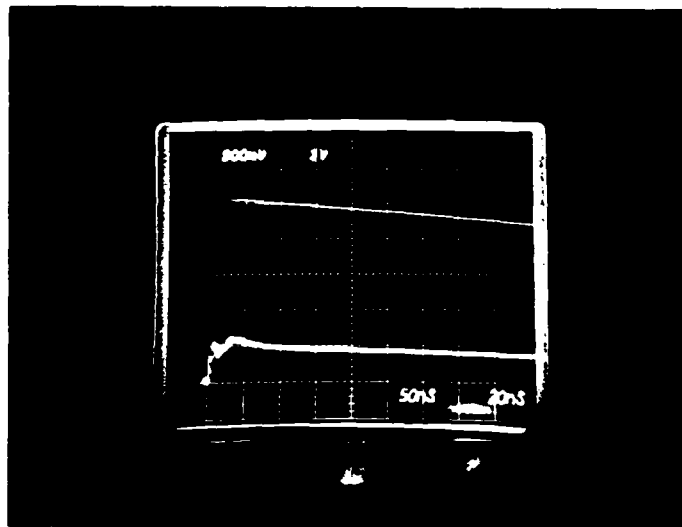
"HOT" LEAD

Date	5-30-85
Test Point	12R-AL-1/10-Ø
Amplification	- dB
Attenuation	- dB
Horizontal	50 ns/div 1
Vertical	.1V (190V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	- 600V
Data Link	
Comments:	467



"HOT" LEAD

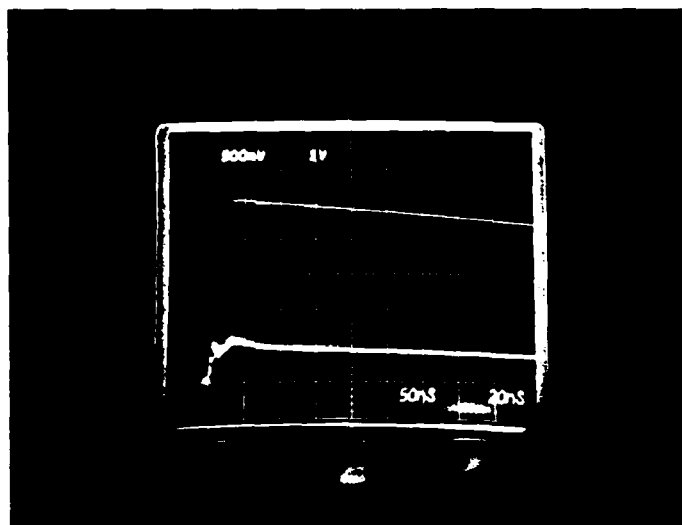
Date 5-23-85  
 Test Point 25-BL-1/10-A  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5 (120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:



27

27

Date 5-23-85  
 Test Point 25R-BL-1/10-A  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5 (120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

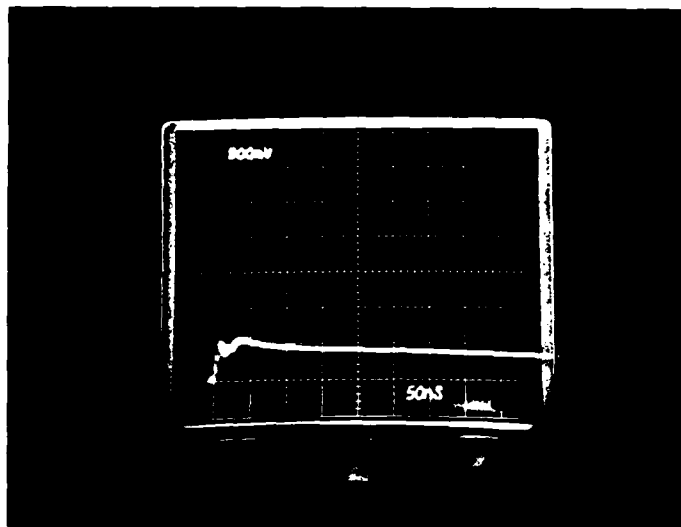


28

28

Date	5-23-85	
Test Point	25-BL-1/10-B	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600	
Data Link		
Comments:		

29

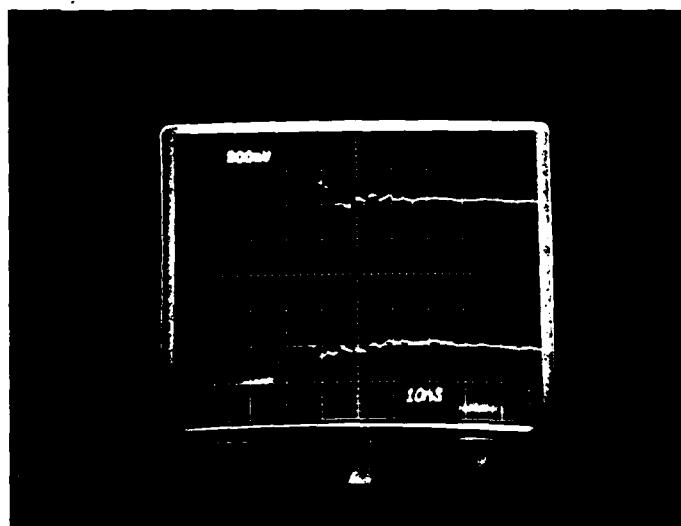


29

Date	5-23-85	
Test Point	25R-BL-1/10-B	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	10	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level		
Data Link		
Comments:		

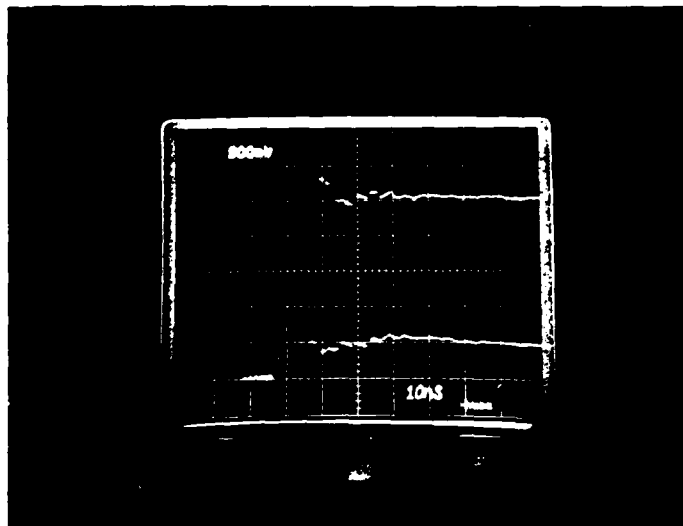
10ns/DIV

30



30

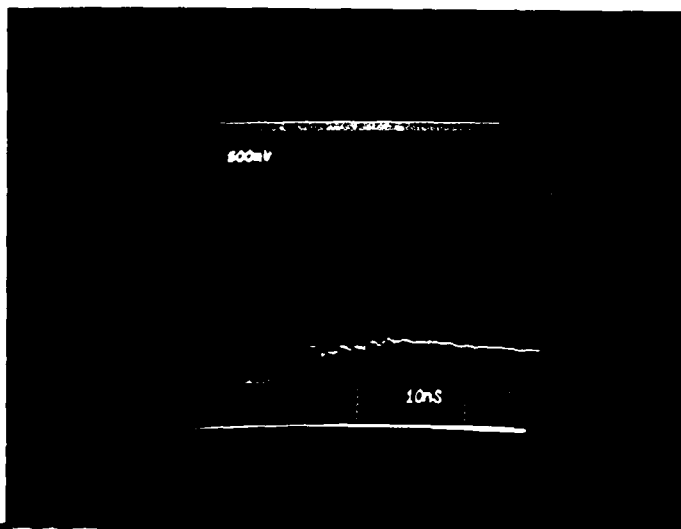
Date 5-23-85  
 Test Point 25-BL-1/10-C  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 10 ns/div 1  
 Vertical .5 (120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:



31

31

Date  
 Test Point 25R-BL-1/10-C  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 10 ns/div 1  
 Vertical .5 (120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:



NO REFERENCE

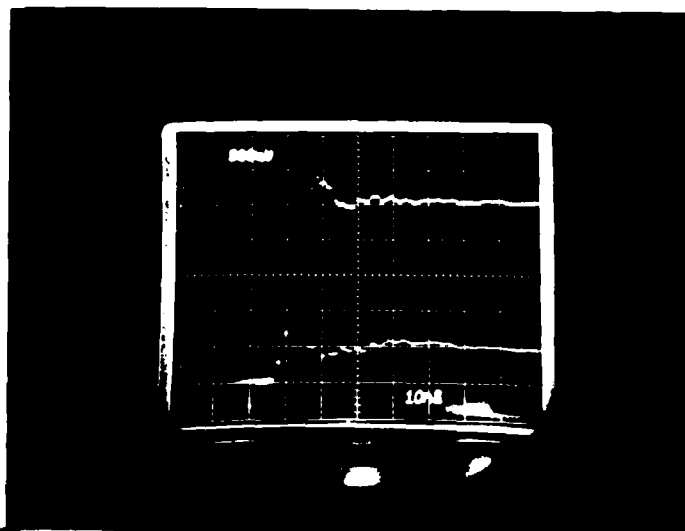
32

32

Date	5-23-85		
Test Point	25-BL-1/10-D		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	10	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:			

33

33

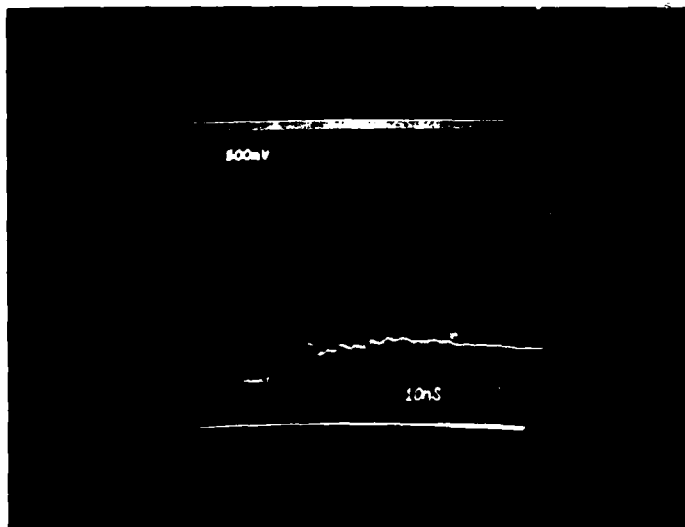


Date	5-23-85		
Test Point	25R-BL-1/10-D		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	10	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:			

NO REFERENCE

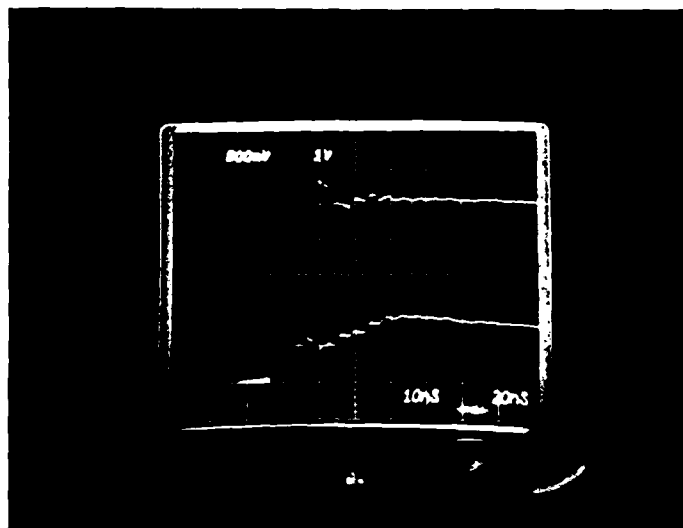
34

34



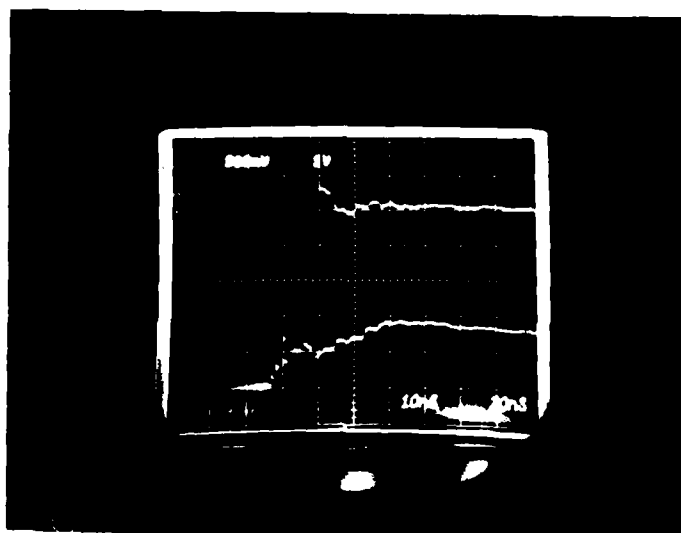
Date	5-23-85		
Test Point	27-BL-1/10-A		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	10	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:			

35 35



Date	5-23-85		
Test Point	27R-BL-1/10-A		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	10	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:			

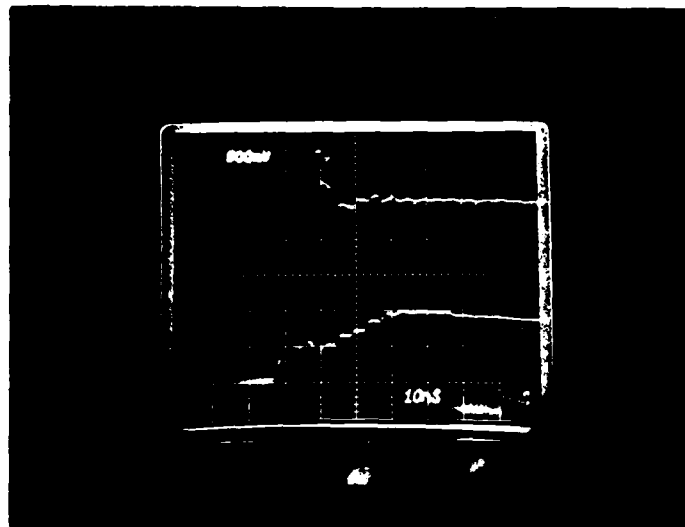
36



Date	5-23-85		
Test Point	27-BL-1/10-B		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	10	ns/div	1
Vertical	0.5V (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:			

37

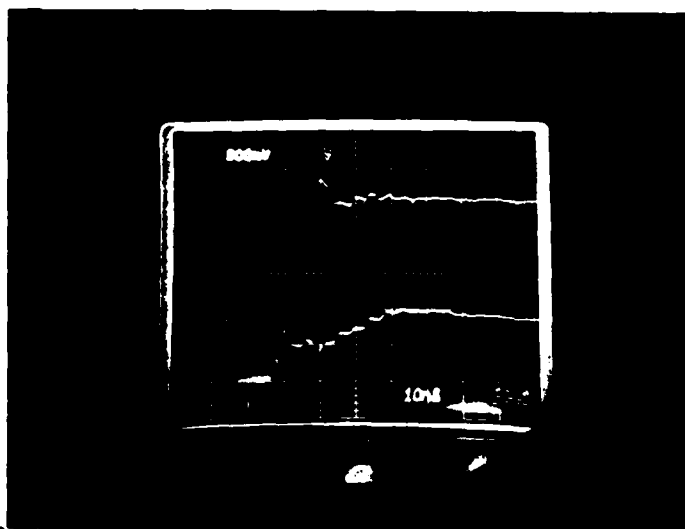
37



Date	5-23-85		
Test Point	27R-BL-1/10-B		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	10	ns/div	1
Vertical	0.5V (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:			

38

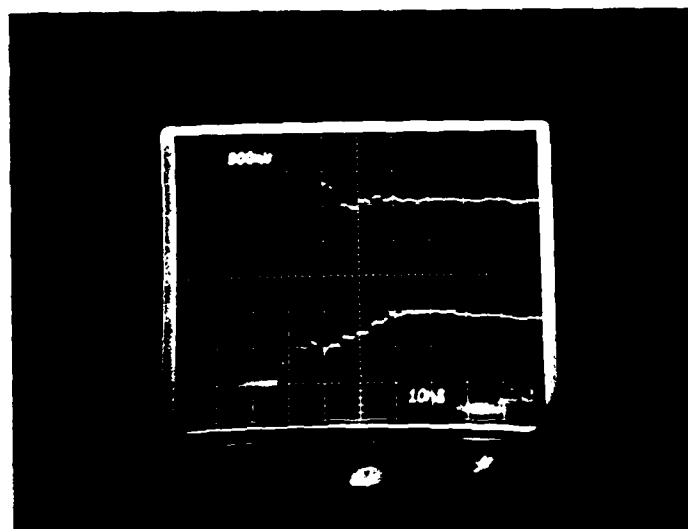
38



Date	5-23-85	
Test Point	27-BL-1/10-C	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	10	ns/div 1
Vertical	5(120V)	V/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulse Level	600V	
Data Link		
Comments:		

39

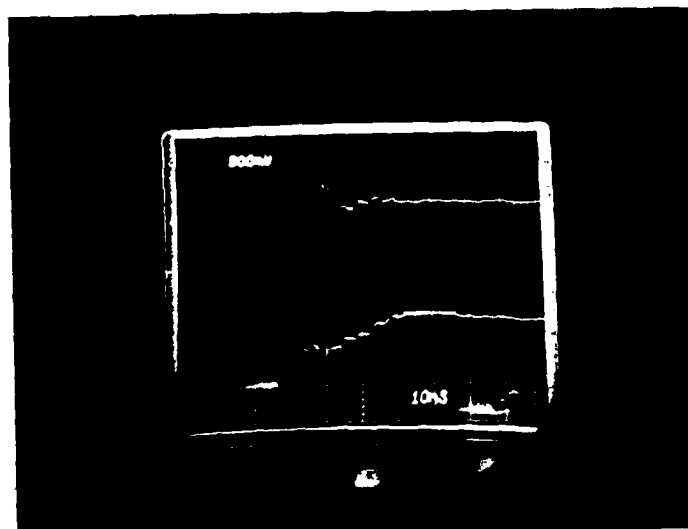
39



Date	5-23-85	
Test Point	27R-BL-1/10-C	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	10	ns/div 1
Vertical	5V(120V)	V/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulse Level	600V	
Data Link		
Comments:		

40

40

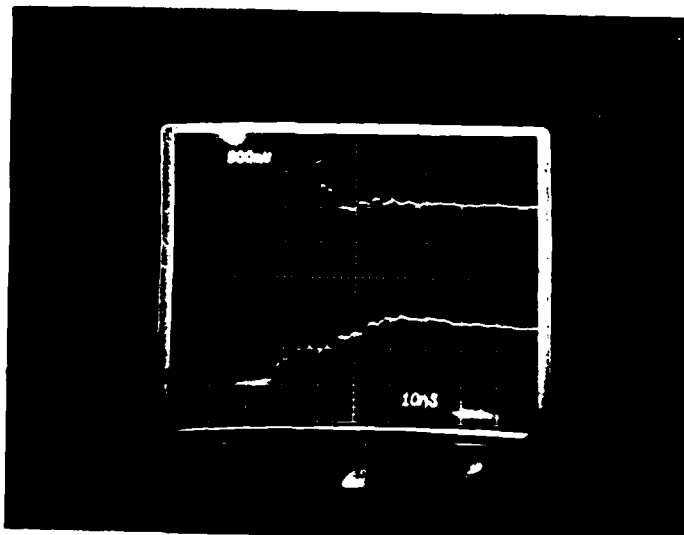




Date	5-23-85
Test Point	27-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	0.5V (120V) 4V/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

41

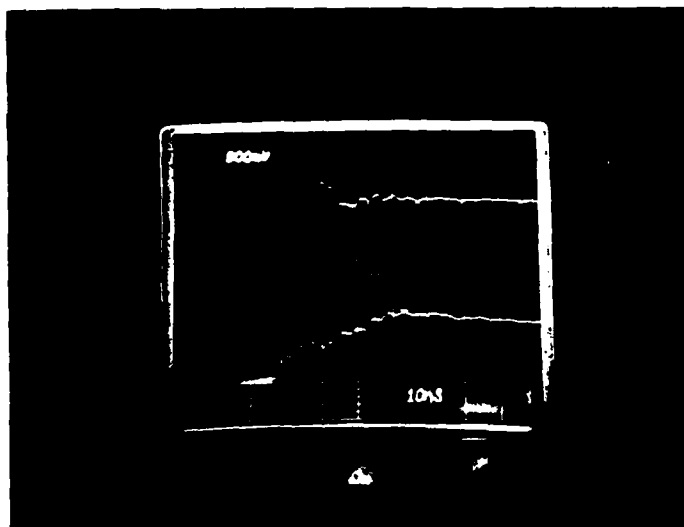
41




Date	5-23-85
Test Point	27R-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	0.5V (120V) 4V/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

42

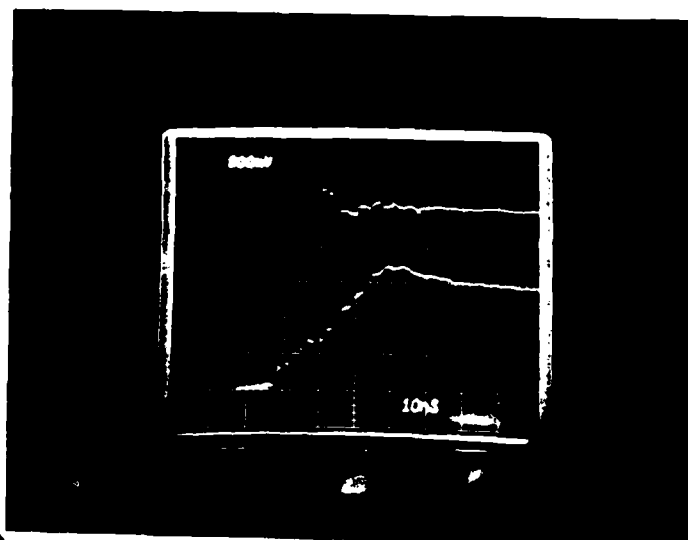
42



Date	5-23-85
Test Point	29-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	0.5V(120V)  /div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

43

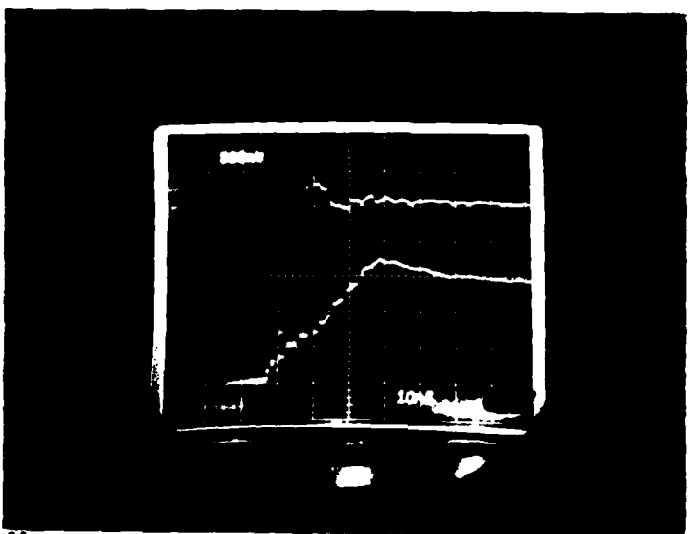
43



Date	5-23-85
Test Point	29R-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

44

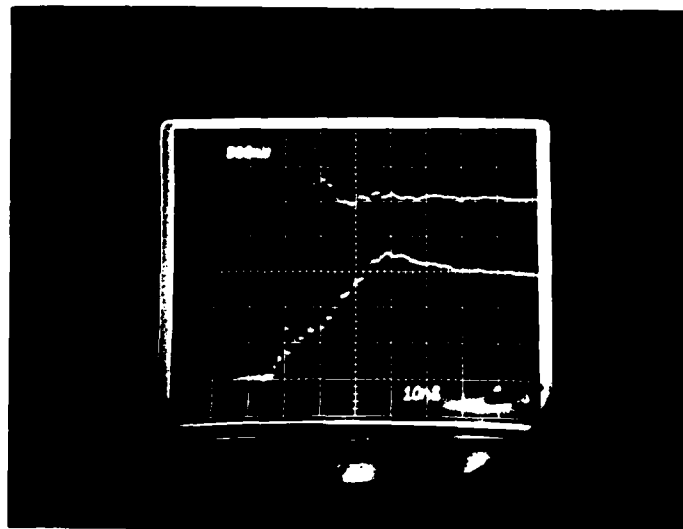
44



Date	5-23-85		
Test Point	29-BL-1/10-B		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	10	ns/div	1
Vertical	0.5V (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:			

45

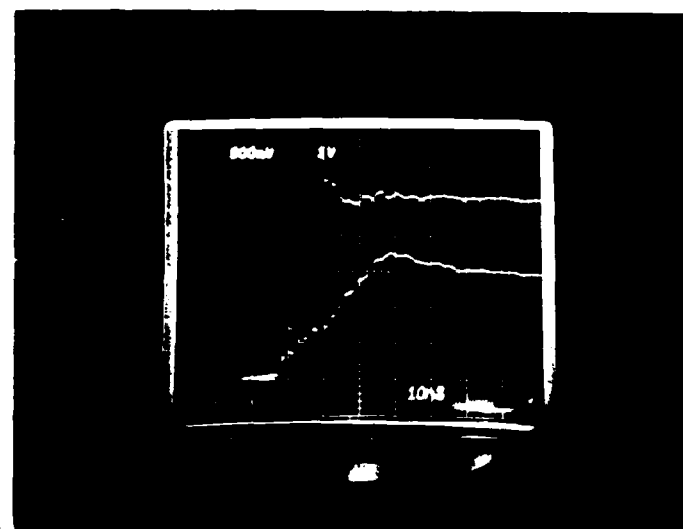
45



Date	5-23-85		
Test Point	29R-BL-1/10-B		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	10	ns/div	1
Vertical	0.5V (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:			

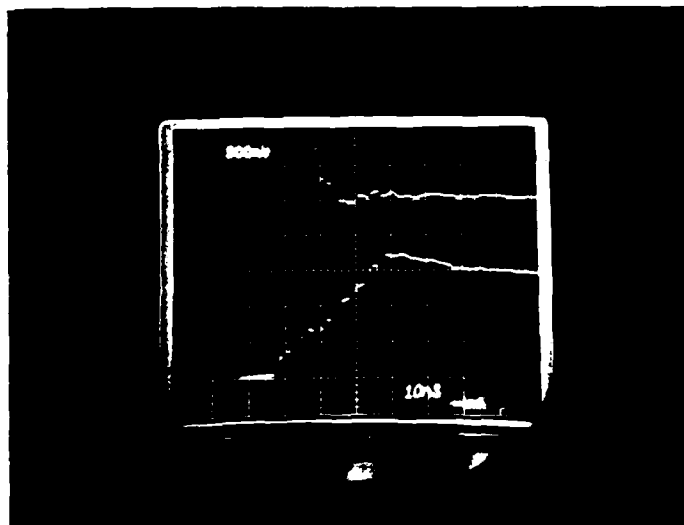
46

46



Date **5-23-85**  
 Test Point **29-BL-1/10-C**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10** ns/div 1  
 Vertical **.5V(120V)** **5**/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

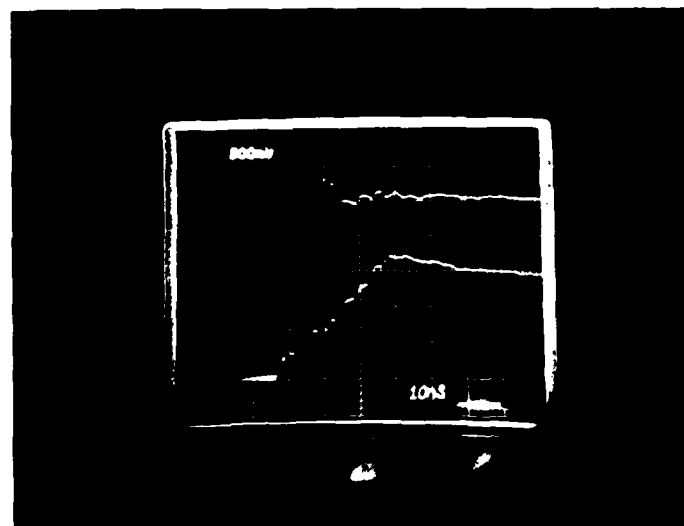
47



47

Date **5-23-85**  
 Test Point **29R-BL-1/10-C**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10** ns/div 1  
 Vertical **.5V(120V)** **5**/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

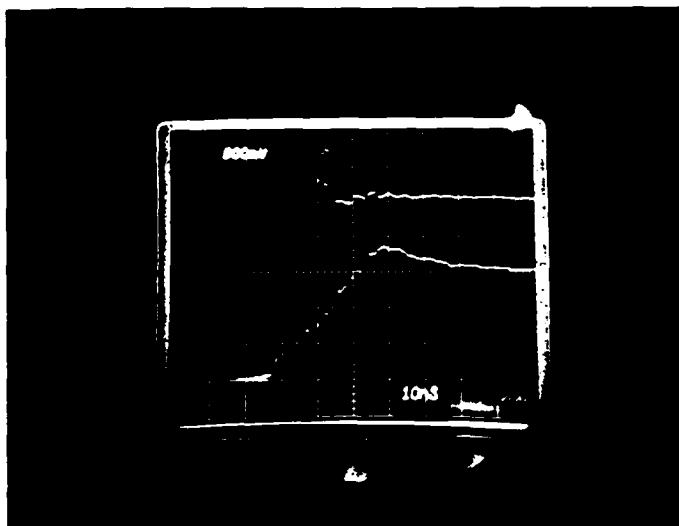
48



48

Date **5-23-85**  
 Test Point **29-BL-1/10-D**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10** ns/div 1  
 Vertical **.5V(120V)** mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

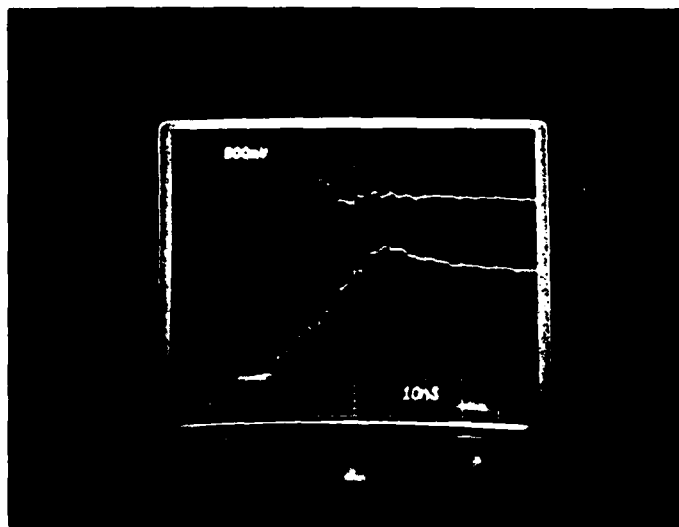
49




49

Date **5-23-85**  
 Test Point **29R-BL-1/10-D**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10** ns/div 1  
 Vertical **.5V(120V)** mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

50

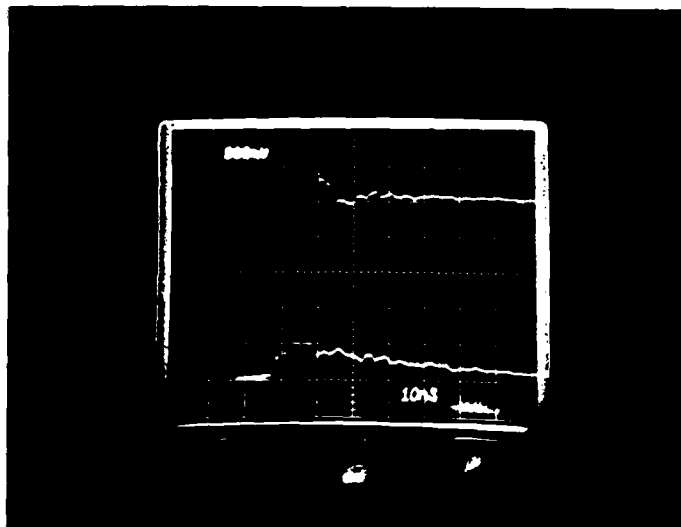


50


Date **5-23-85**  
 Test Point **31-BL-1/10-A**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10** ns/div 1  
 Vertical **.5V (120V)**  /div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level **600V**  
 Data Link

Comments:

51

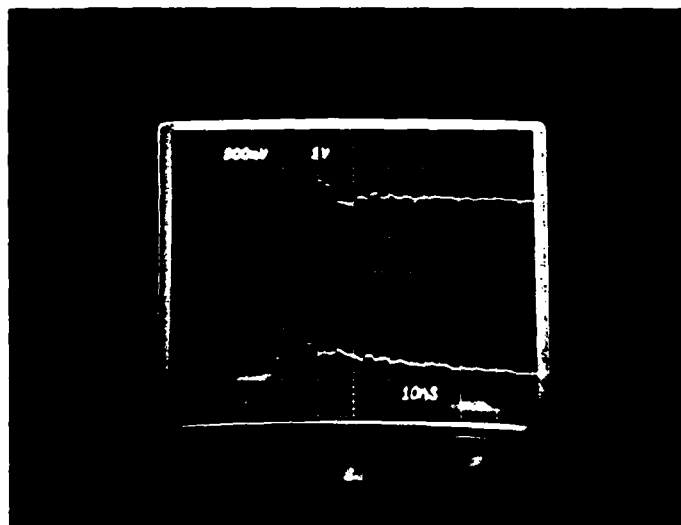


51

Date **5-23-85**  
 Test Point **31R-BL-1/10-A**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10** ns/div 1  
 Vertical **.5V (120V)**  /div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level **600V**  
 Data Link

Comments:

52

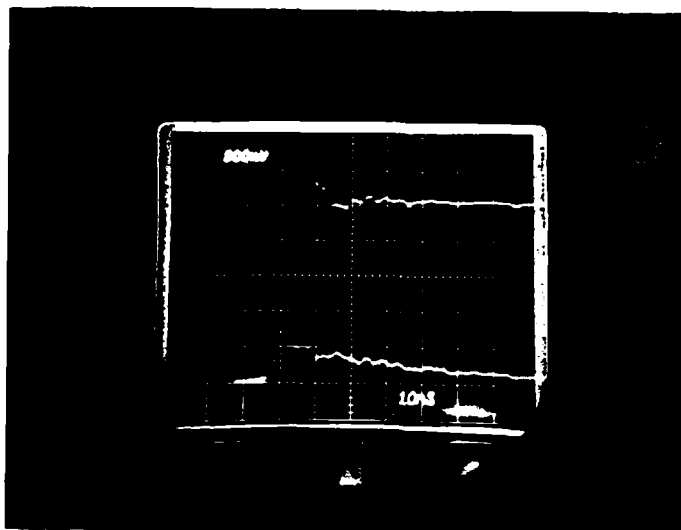


52

Date	5-23-85		
Test Point	31-BL-1/10-B		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	10	ns/div	1
Vertical	5V (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			

Comments:

53

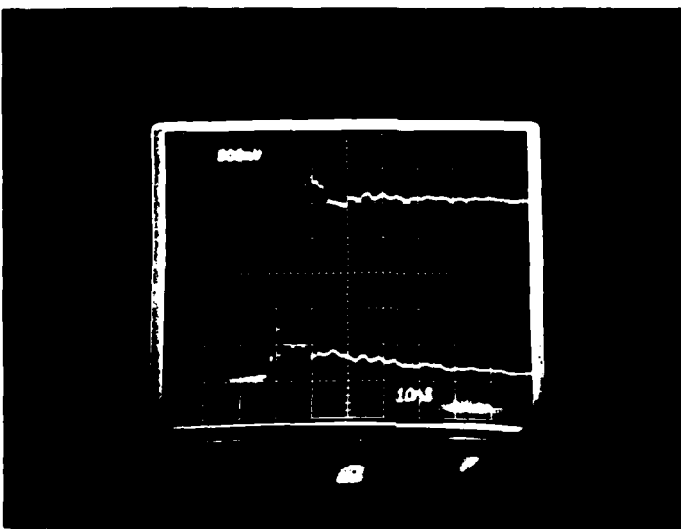


53

Date	5-23-85		
Test Point	31R-BL-1/10-B		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	10	ns/div	1
Vertical	5V (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			

Comments:

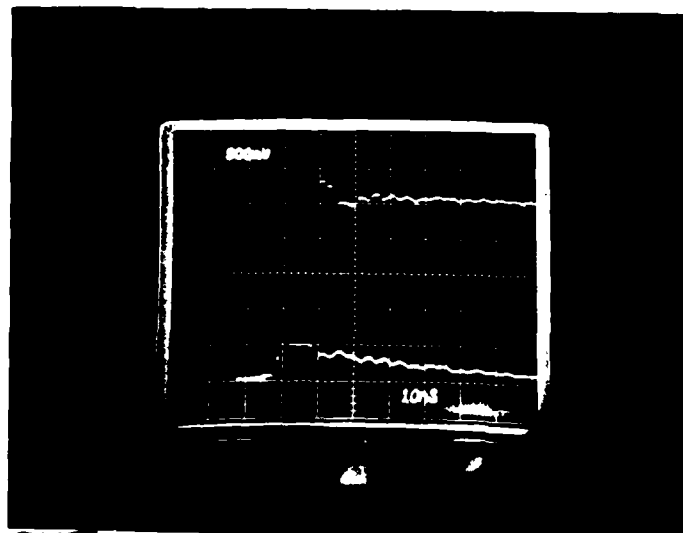
54



54

Date	5-23-85
Test Point	31-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

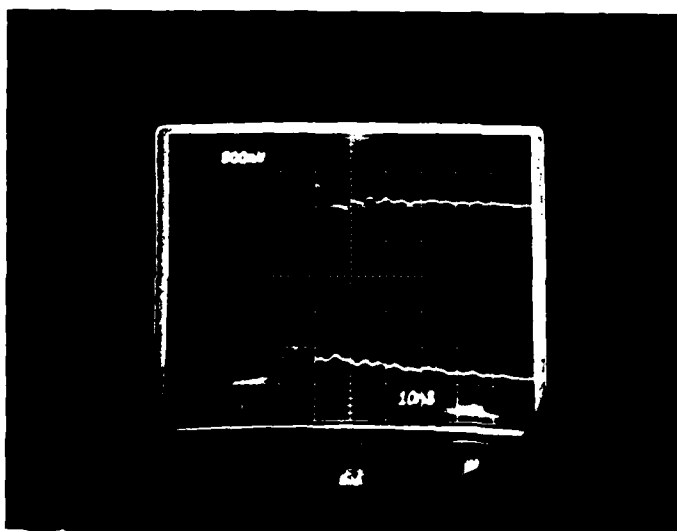
55



55

Date	5-23-85
Test Point	31R-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

56

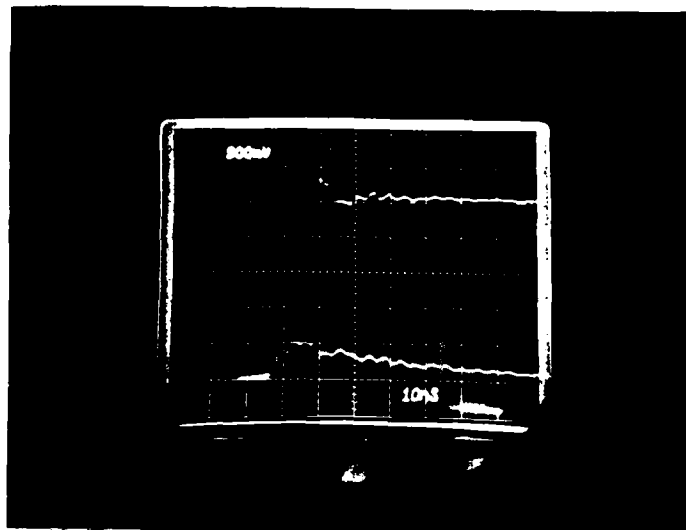


56



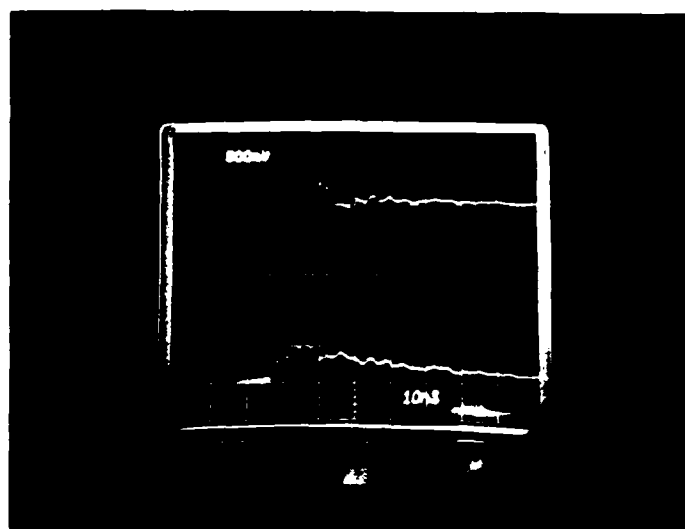
Date	5-23-85
Test Point	31-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

57



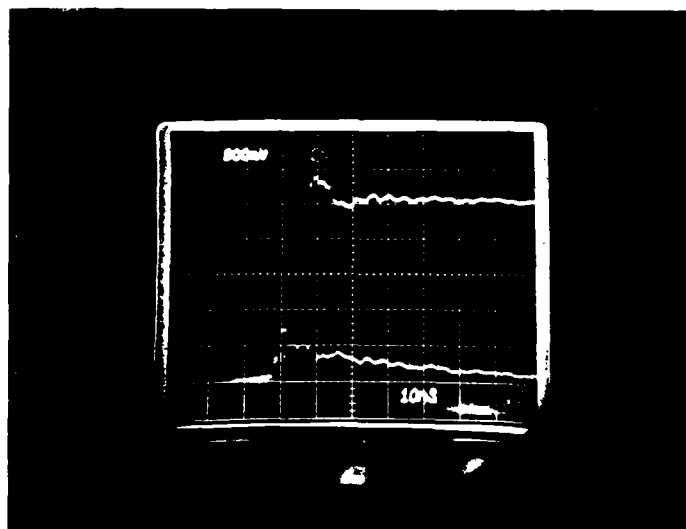
Date	5-23-85
Test Point	31R-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

58



Date	5-23-85
Test Point	31-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

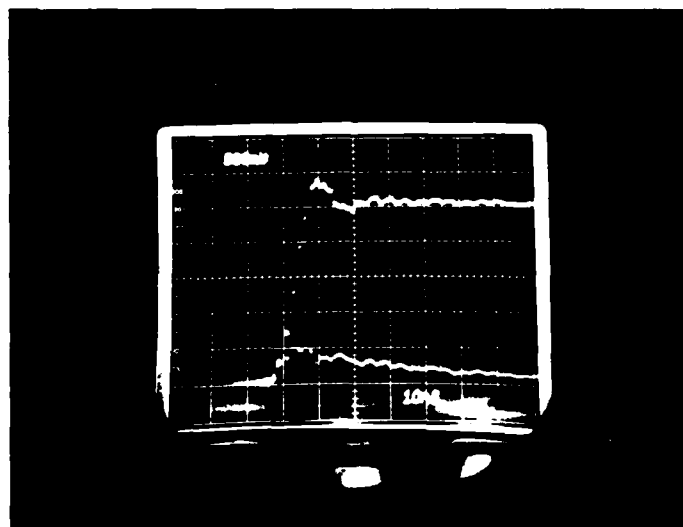
59



59

Date	5-23-85
Test Point	31R-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

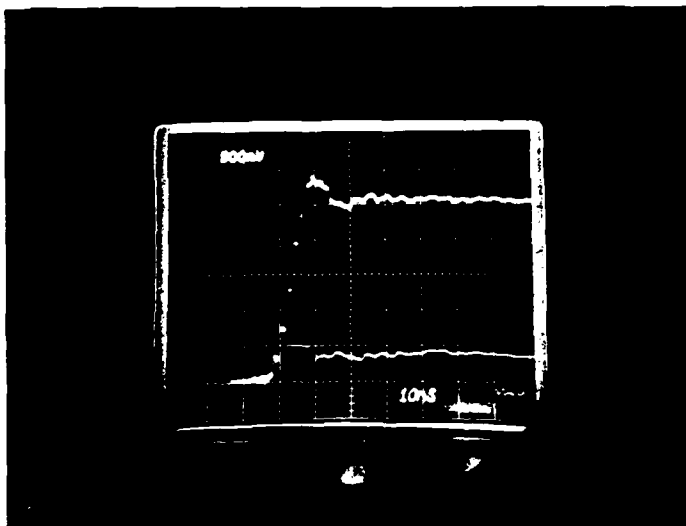
60



60

Date	5-23-85
Test Point	34-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	.5V (120V) <del>10</del> /div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	

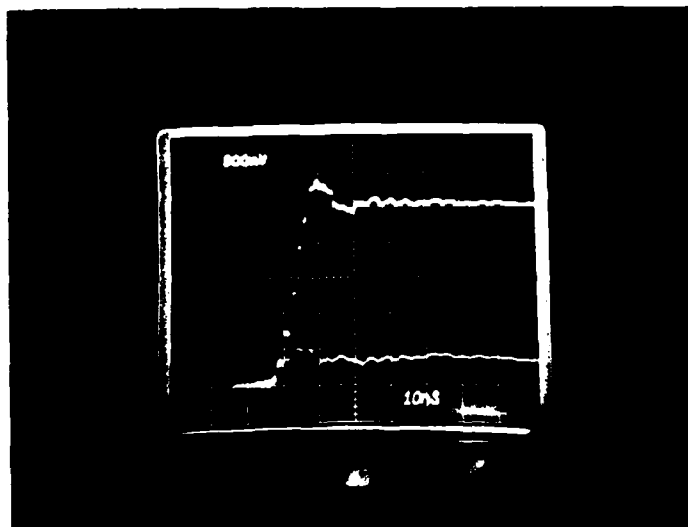
61



61

Date	5-23-85
Test Point	34R-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	.5V (120V) <del>10</del> /div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	

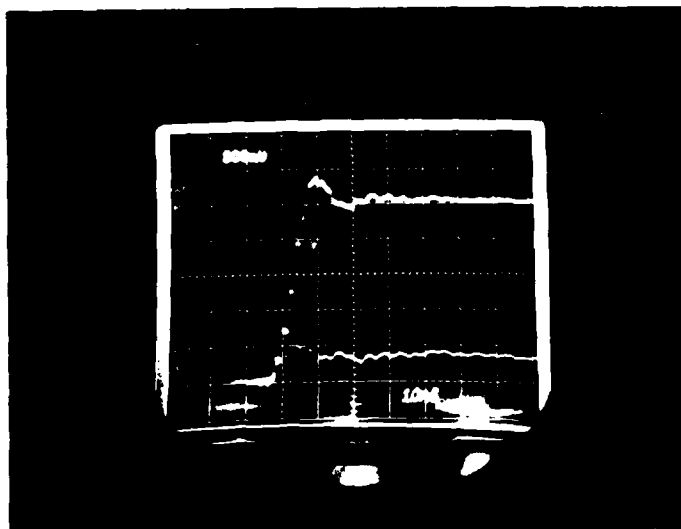
62



62

Date	5-23-85
Test Point	34-BL-1/0-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	0.5V(120V) <del>10V</del> /div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

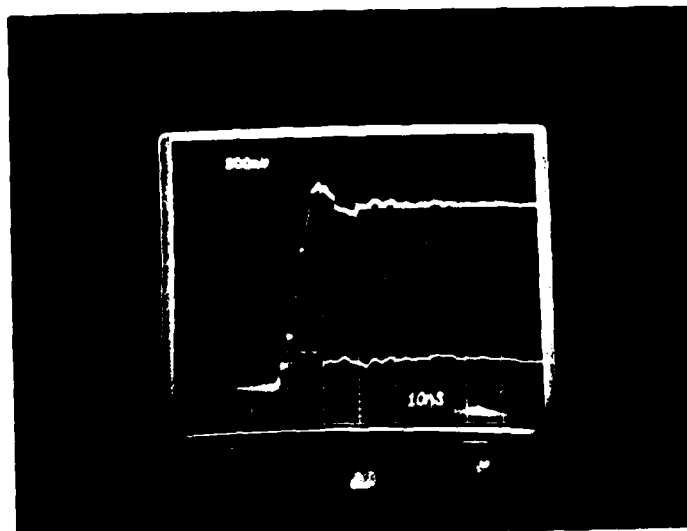
63



63

Date	5-23-85
Test Point	34R-BL-1/0-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	0.5V(120V) <del>10V</del> /div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

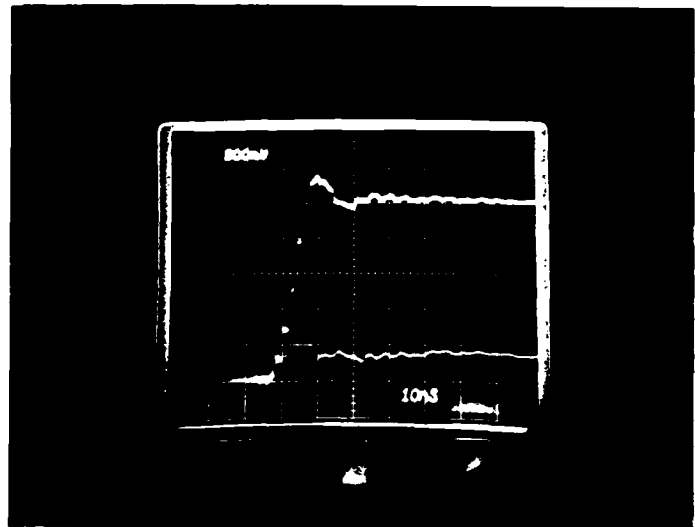
64



64

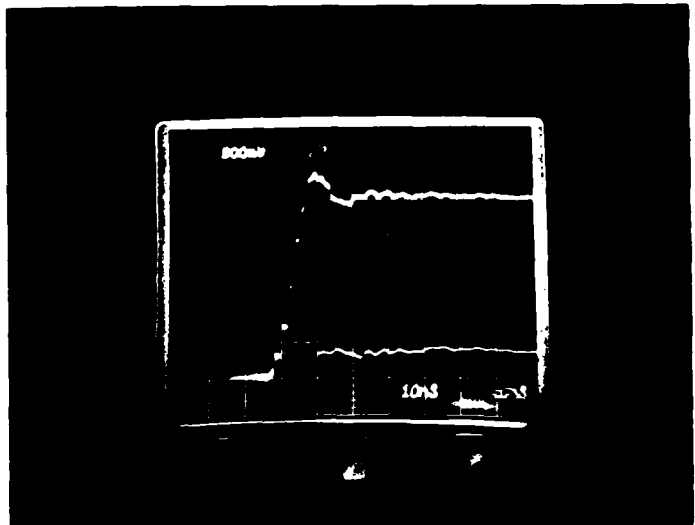
Date	5-23-85
Test Point	34-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

65



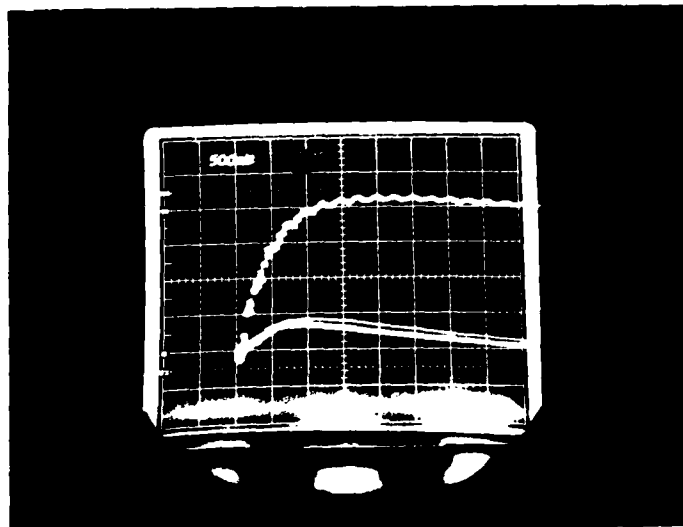
Date	5-23-85
Test Point	34R-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

66



Date **5-30-85**  
 Test Point **39-AL-1/10-φ**  
 Amplification **—** dB  
 Attenuation **—** dB  
 Horizontal **50** ns/div 1  
 Vertical **.5V(120)** mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level **+ 600V**  
 Data Link  
 Comments: **456**

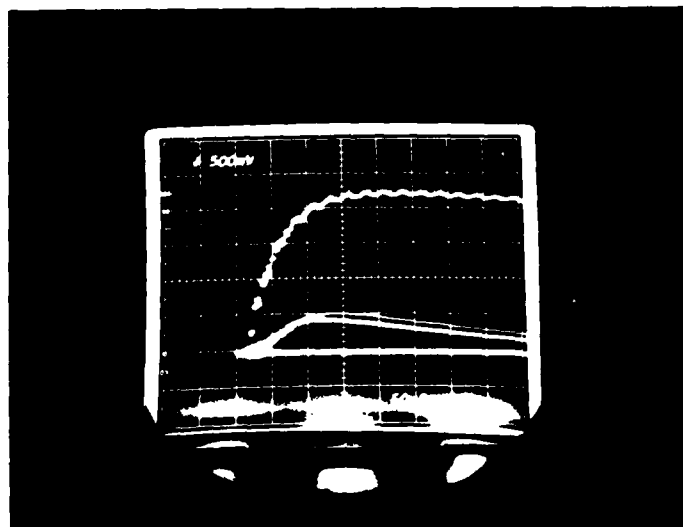
**NEUTRAL LEAD**



**456**

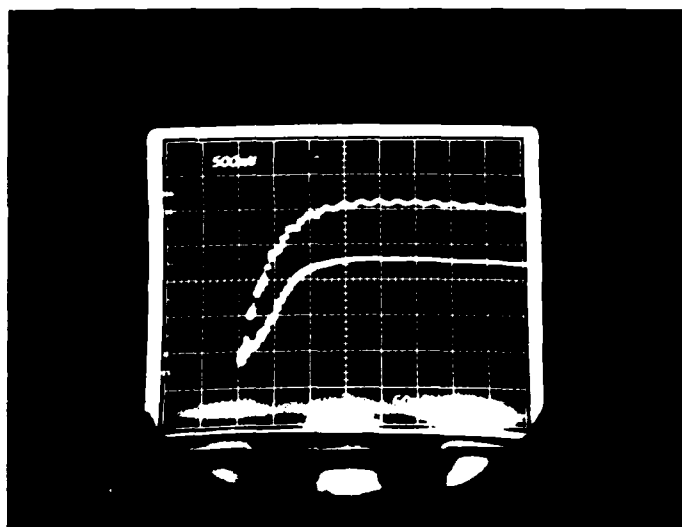
Date **5-30-85**  
 Test Point **39R-AL-1/10-φ**  
 Amplification **—** dB  
 Attenuation **—** dB  
 Horizontal **50** ns/div 1  
 Vertical **.5V(120)** mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level **— 600V**  
 Data Link  
 Comments: **457**

**NEUTRAL LEAD**



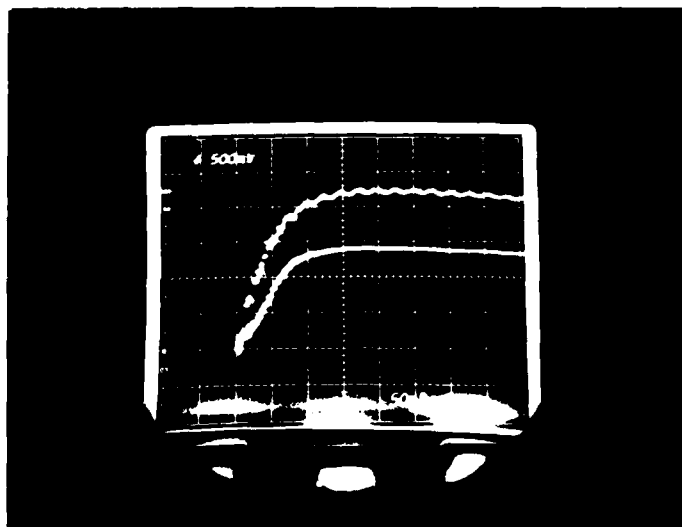
**457**

Date	5-30-85
Test Point	39-AL-1/10-φ
Amplification	dB
Attenuation	dB
Horizontal	50 ns/div 1
Vertical	.5V (120) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	+ 600V
Data Link	
Comments:	458
POSITIVE LEAD TEST	



458

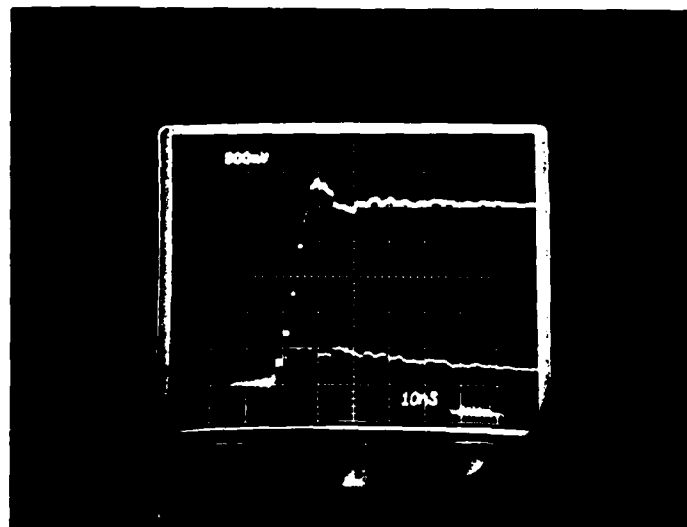
Date	5-30-85
Test Point	39R-AL-1/10-φ
Amplification	dB
Attenuation	dB
Horizontal	50 ns/div 1
Vertical	.5V (120) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	- 600V
Data Link	
Comments:	459
POSITIVE LEAD TEST	



459

Date	5-23-85
Test Point	40-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	5V (120V) 100V/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

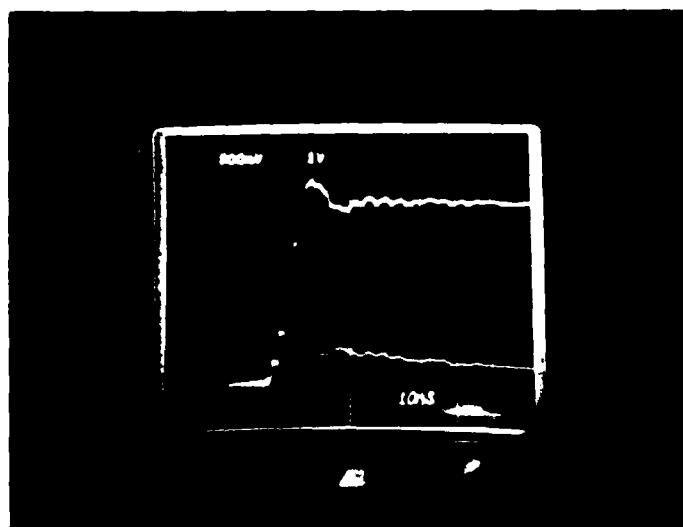
67



67

Date	5-23-85
Test Point	40R-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

68



68



Date **5-23-85**

Test Point **40-BL-1/10-B**

Amplification **0 dB**

Attenuation **0 dB**

Horizontal **10** ns/div 1

Vertical **.5V (120V)** mV/div 1

Horizontal ns/div 2

Vertical ns/div 2

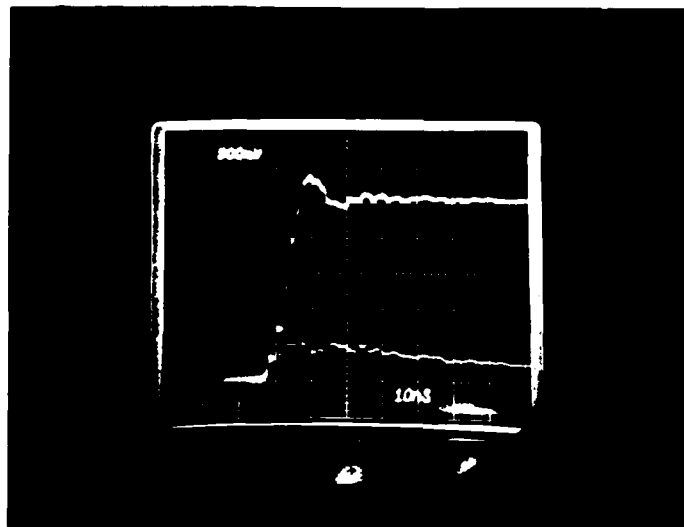
Configuration

Pulser Level **600V**

Data Link

Comments:

**69**



**69**

Date **5-23-85**

Test Point **40R-BL-1/10-B**

Amplification **0 dB**

Attenuation **0 dB**

Horizontal **10** ns/div 1

Vertical **.5V (120V)** mV/div 1

Horizontal ns/div 2

Vertical ns/div 2

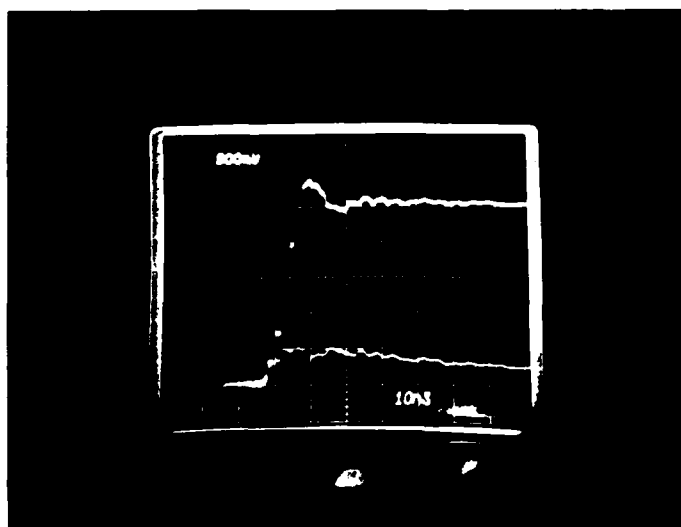
Configuration

Pulser Level **600V**

Data Link

Comments:

**70**

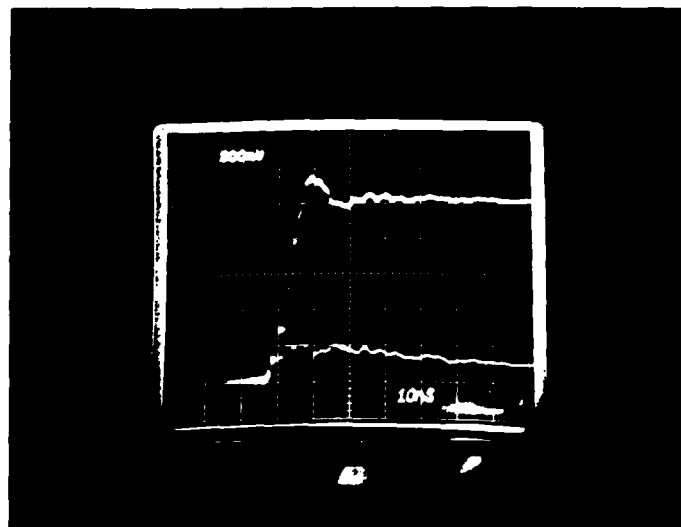


**70**

Date **5-23-85**  
 Test Point **40-BL-1/10-C**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10** ns/div 1  
 Vertical **0.5V (120V)** mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level **600V**  
 Data Link

Comments:

71

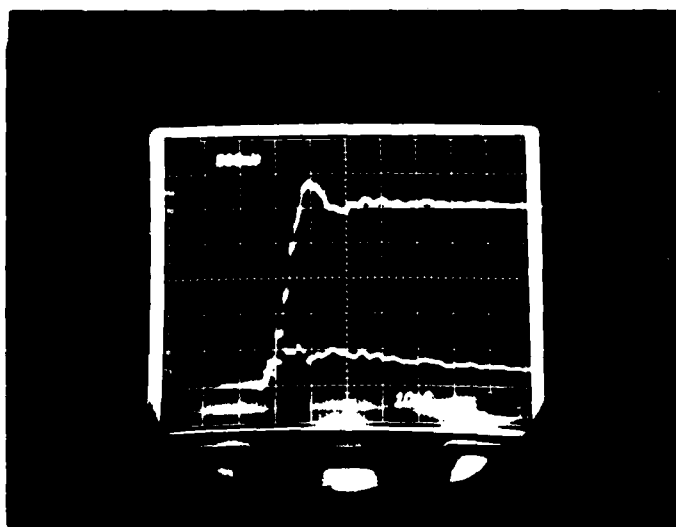


71

Date **5-23-85**  
 Test Point **40R-BL-1/10-C**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10** ns/div 1  
 Vertical **0.5V (120V)** mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level **600V**  
 Data Link

Comments:

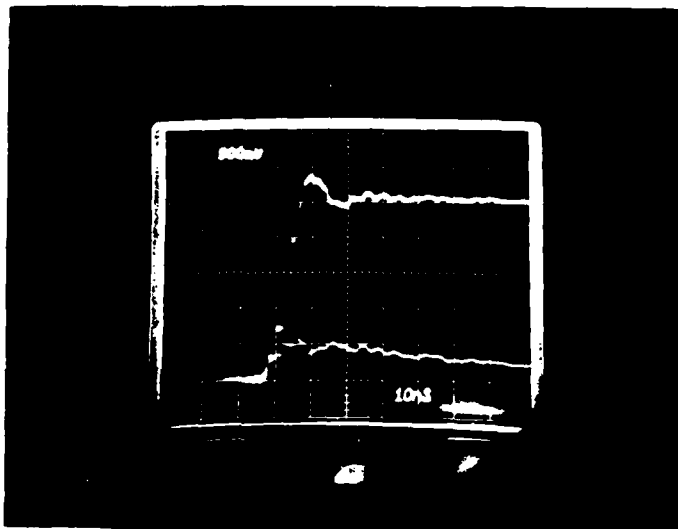
72



72

Date	5-23-85
Test Point	40-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	

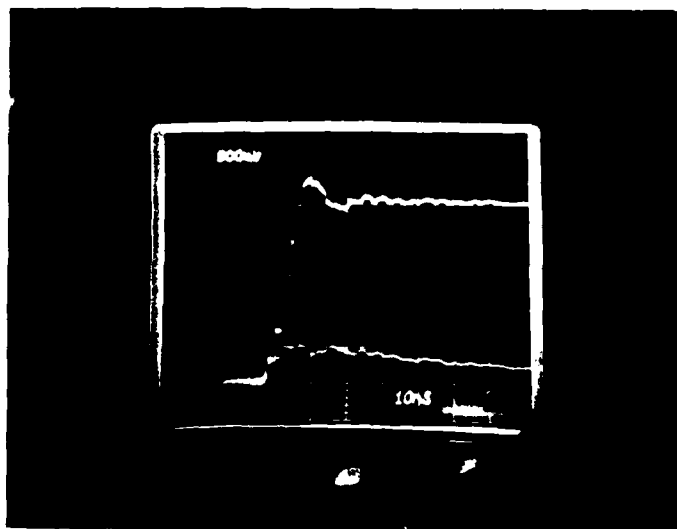
73



73

Date	5-23-85
Test Point	40R-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	

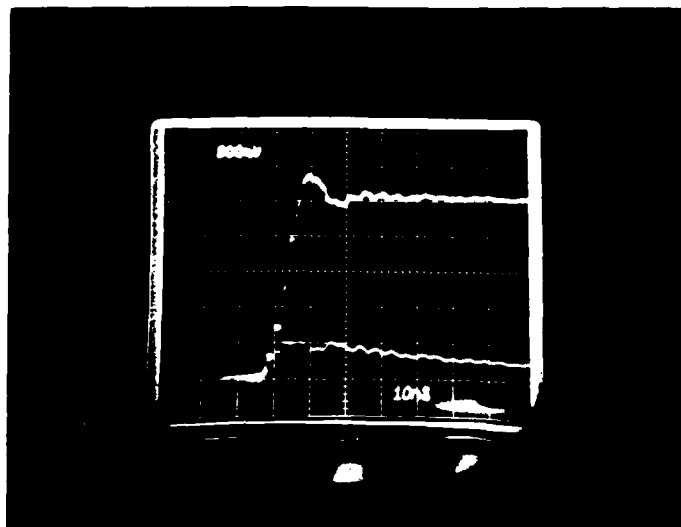
74



74

Date	5-23-85		
Test Point	40-BL-1/10-E		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	10	ns/div	1
Vertical	.5V(120V)	div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:			

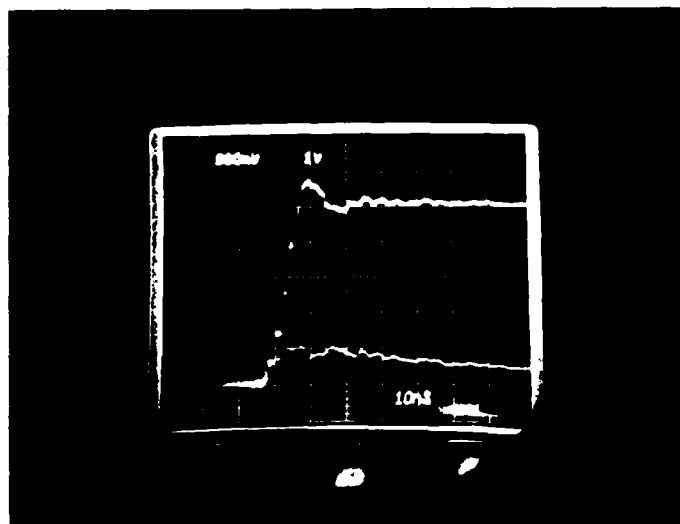
75



75

Date	5-23-85		
Test Point	40R-BL-1/10-E		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	10	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:			

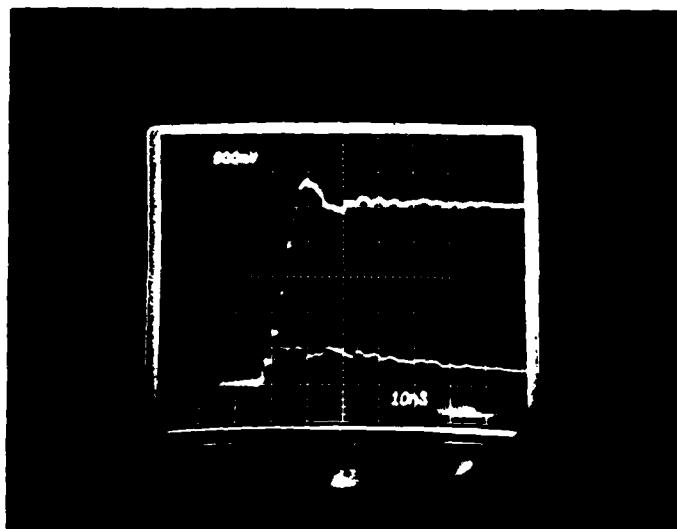
76



76

Date	5-23-85		
Test Point	40-BL-1/10-F		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	10	ns/div	1
Vertical	0.5 (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:			

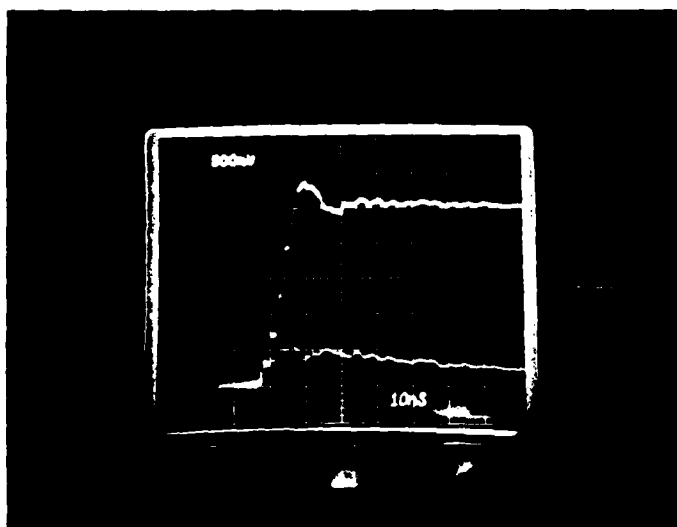
77



77

Date	5-23-85		
Test Point	40R-BL-1/10-F		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	10	ns/div	1
Vertical	0.5V (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:			

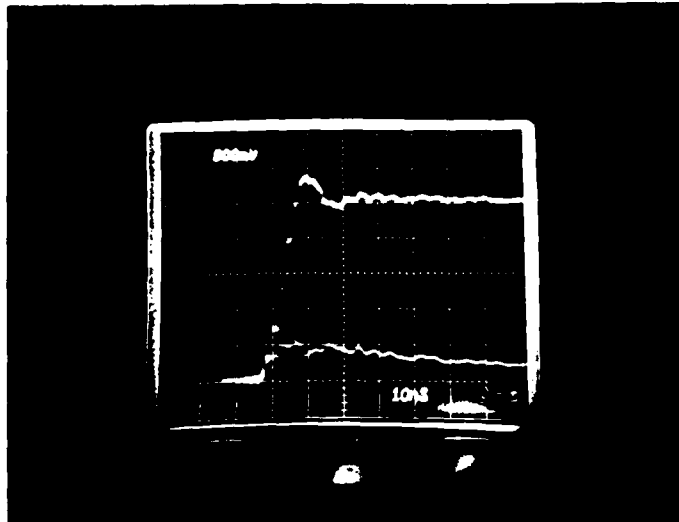
78



78

Date **5-23-85**  
 Test Point **40-BL-1/10-G**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10 ns/div 1**  
 Vertical **.5V (120V) mV/div 1**  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

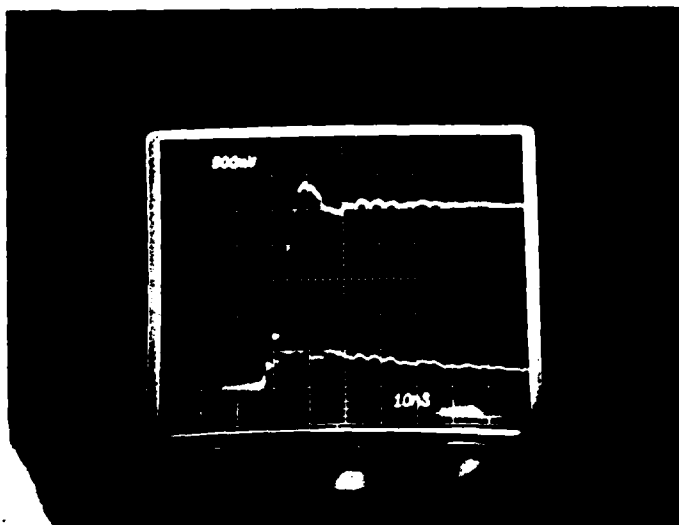
79



79

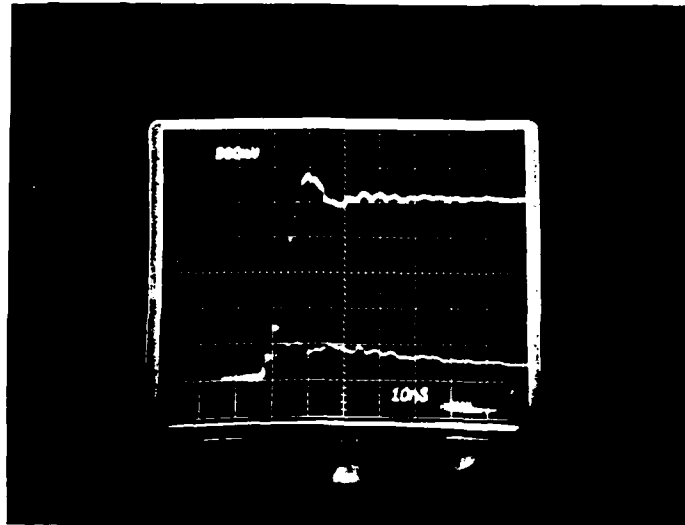
Date **5-23-85**  
 Test Point **40R-BL-1/10-G**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10 ns/div 1**  
 Vertical **.5V (120V) mV/div 1**  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

80



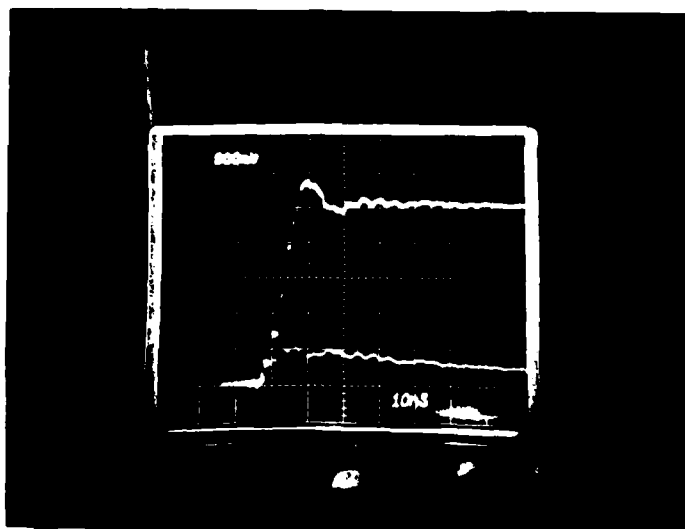
80

Date	5-23-85	
Test Point	4D-BL-1/10-H	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	10	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		
Comments:	81	



81

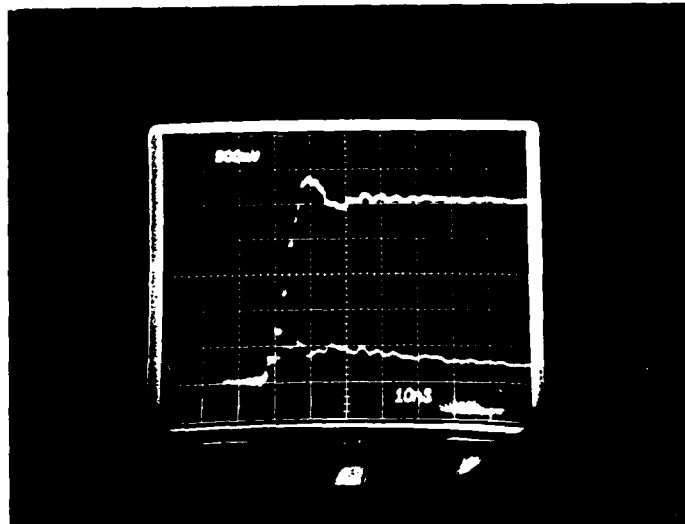
Date	5-23-85	
Test Point	40R-BL-1/10-H	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	10	ns/div 1
Vertical	.5(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		
Comments:	82	



82

Date **3-23-85**  
 Test Point **40-BL-1/10-I**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10 ns/div 1**  
 Vertical **5V (120V) mV/div 1**  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

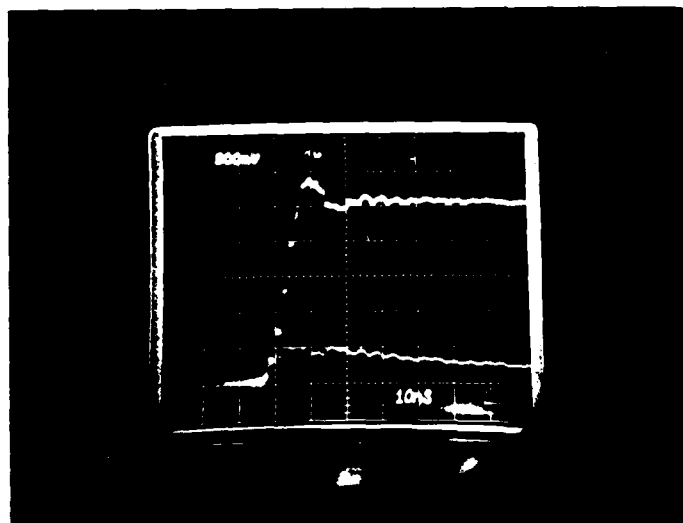
**83**



**83**

Date **3-23-85**  
 Test Point **40R-BL-1/10-I**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10 ns/div 1**  
 Vertical **.5V (120V) mV/div 1**  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

**84**

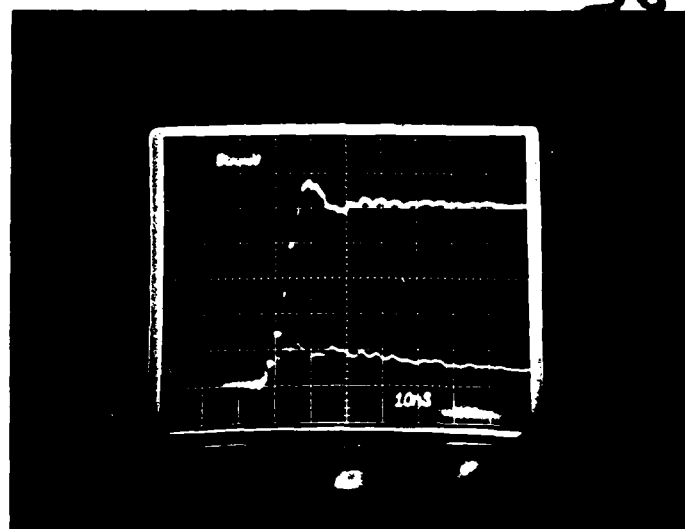


**84**



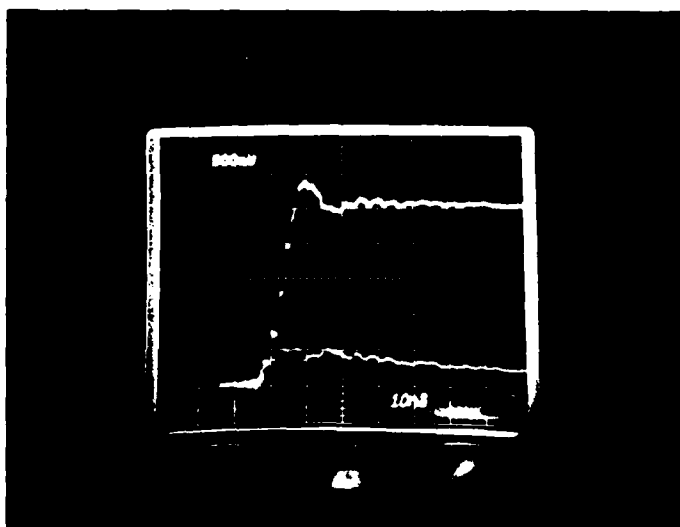
Date **5-23-85**  
 Test Point **40-BL-1/10-J**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10** ns/div 1  
 Vertical **.5V (120V)** mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

85



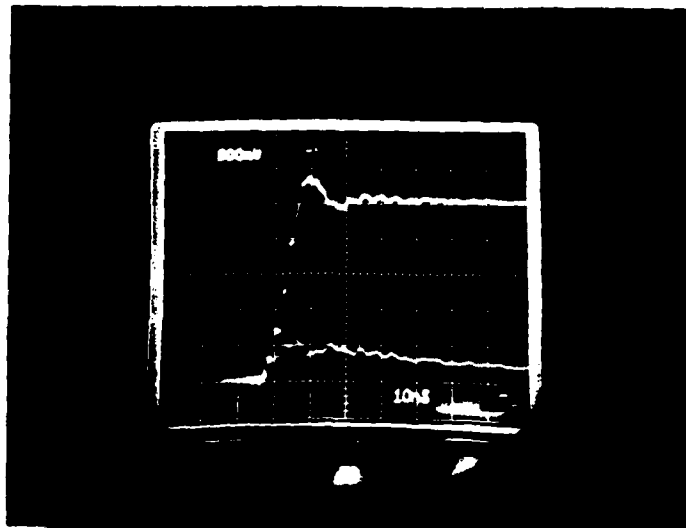
Date **5-23-85**  
 Test Point **40R-BL-1/10-J**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10** ns/div 1  
 Vertical **.5V (120V)** mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

86



Date	5-23-85
Test Point	40-8L-1/10-K
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

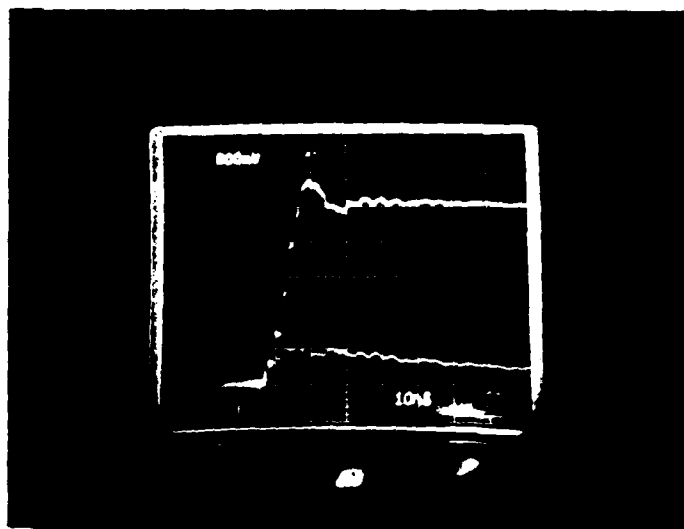
87



87

Date	5-23-85
Test Point	40R-8L-1/10-K
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

88



88

Date **5-23-85**

Test Point **40-BL-1/10-L**

Amplification **0 dB**

Attenuation **0 dB**

Horizontal **10** ns/div 1

Vertical **.5V (120V)** mV/div 1

Horizontal **ns/div 2**

Vertical **ns/div 2**

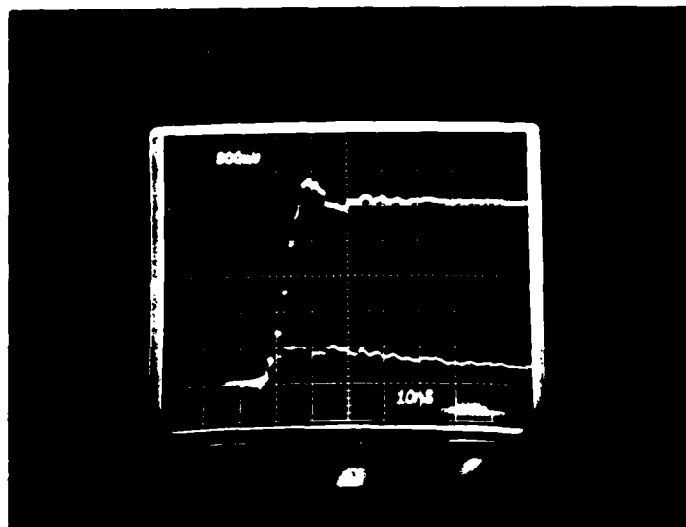
Configuration

Pulser Level **600V**

Data Link

Comments:

**89**



**89**

Date

Test Point **40R-BL-1/10-L**

Amplification **0 dB**

Attenuation **0 dB**

Horizontal **10** ns/div 1

Vertical **.5V (120V)** mV/div 1

Horizontal **ns/div 2**

Vertical **ns/div 2**

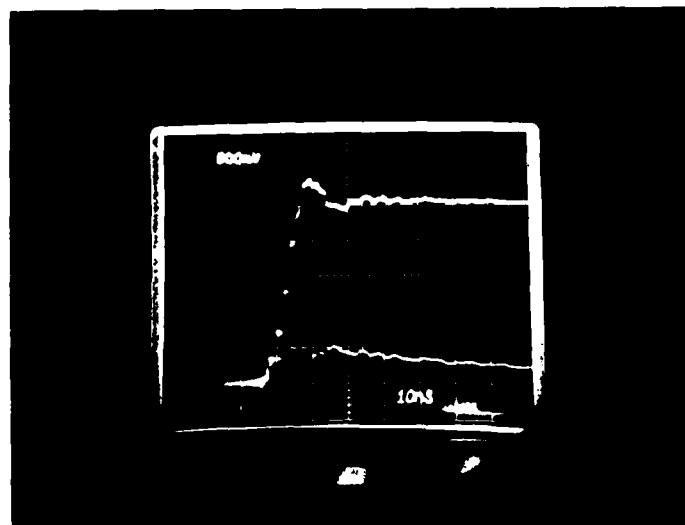
Configuration

Pulser Level **600V**

Data Link

Comments:

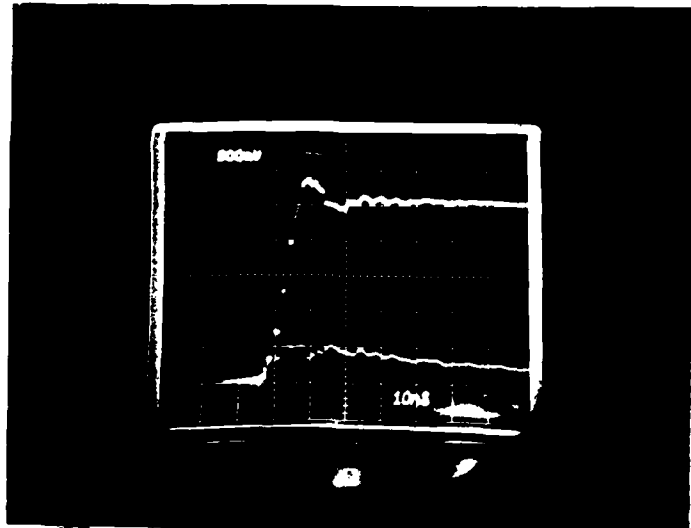
**90**



**90**

Date **5-23-85**  
 Test Point **40-BL- $\frac{1}{10}$ -M**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10 ns/div 1**  
 Vertical **.5V(120V) mV/div 1**  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

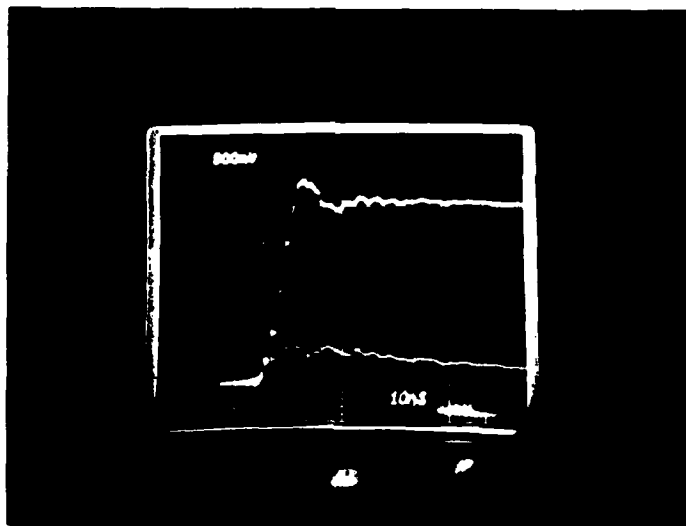
91



91

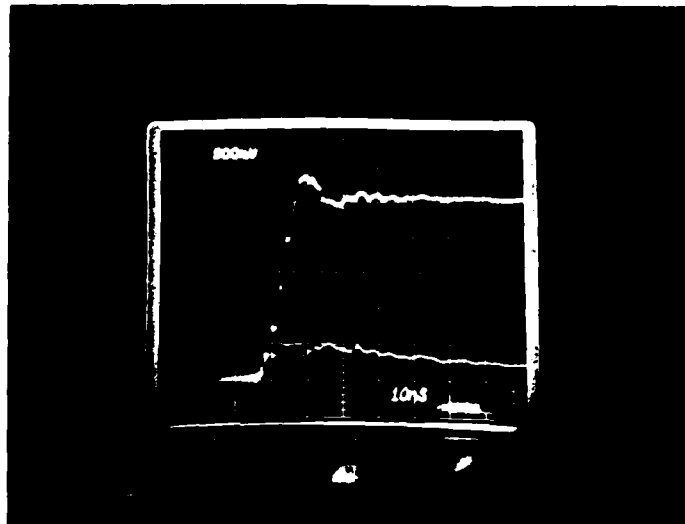
Date **5-23-85**  
 Test Point **40R-BL- $\frac{1}{10}$ -M**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10 ns/div 1**  
 Vertical **.5V(120V) mV/div 1**  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

92

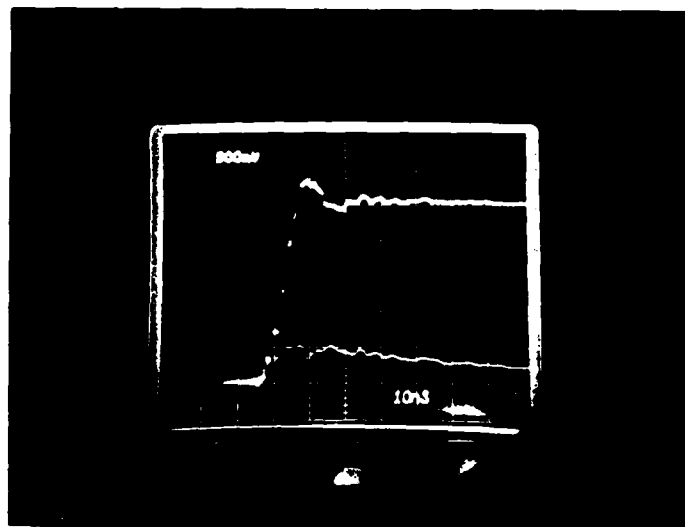


92

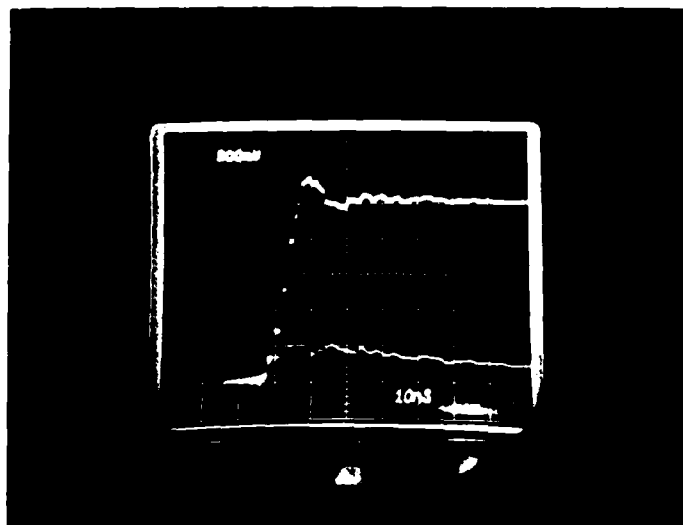
Date	5-23-85
Test Point	40-BL-1/10-N
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	93



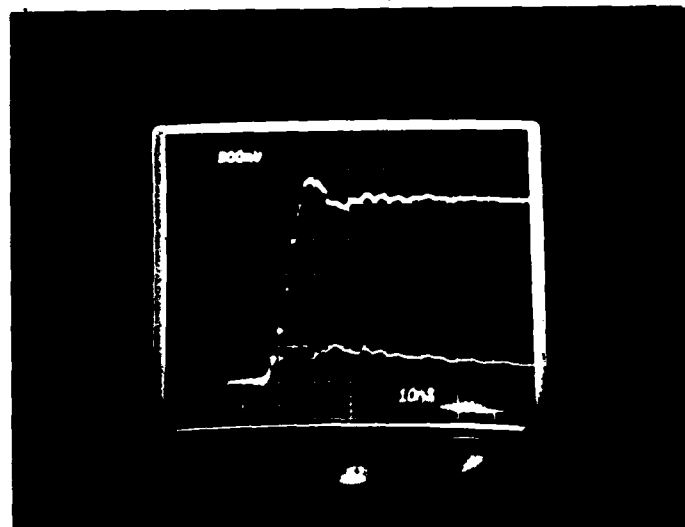
Date	5-23-85
Test Point	40R-BL-1/10-N
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	94



Date	5-23-85
Test Point	40-BL-1/10-0
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	.5 (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	95

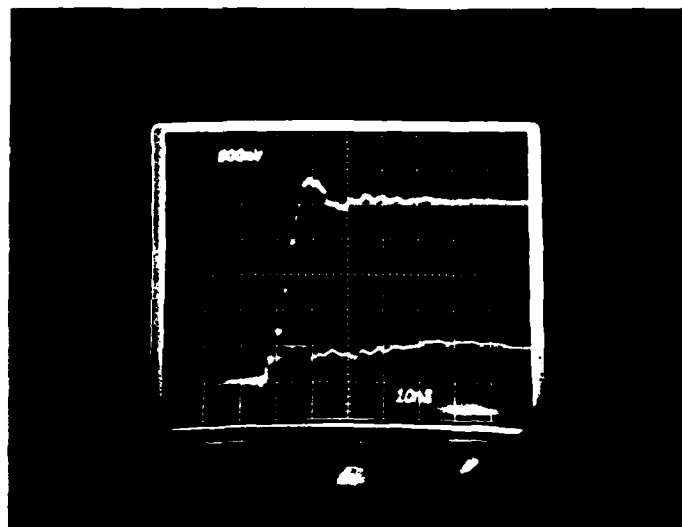


Date	5-23-85
Test Point	40R-BL-1/10-0
Amplification	0 dB
Attenuation	0 dB
Horizontal	10 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	96



Date **5-23-85**  
 Test Point **43-BL-1/10-A**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10 ns/div 1**  
 Vertical **.5V(120V) mV/div 1**  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulser Level **600V**  
 Data Link  
 Comments:

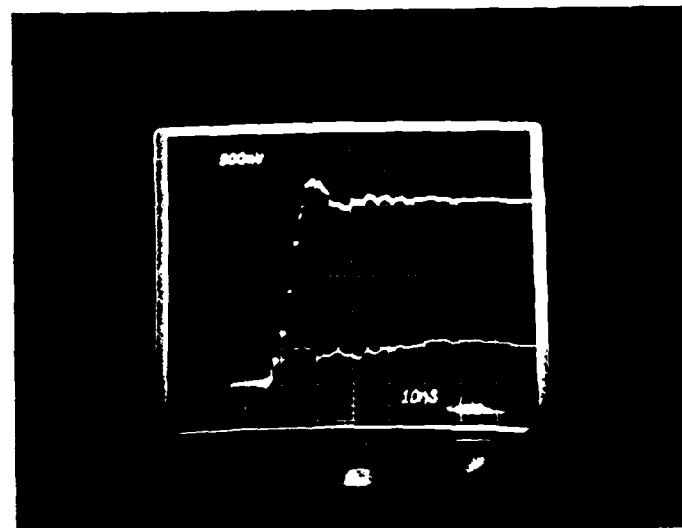
97



97

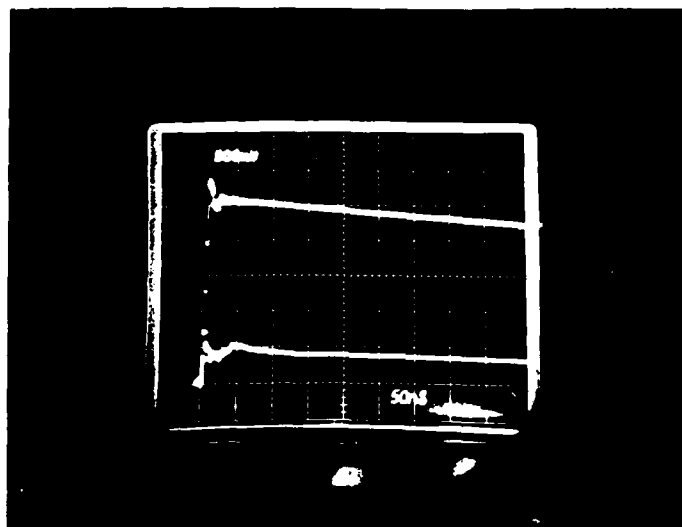
Date **5-23-85**  
 Test Point **43R-BL-1/10-A**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **10 ns/div 1**  
 Vertical **.5V(120V) mV/div 1**  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulser Level **600V**  
 Data Link  
 Comments:

98



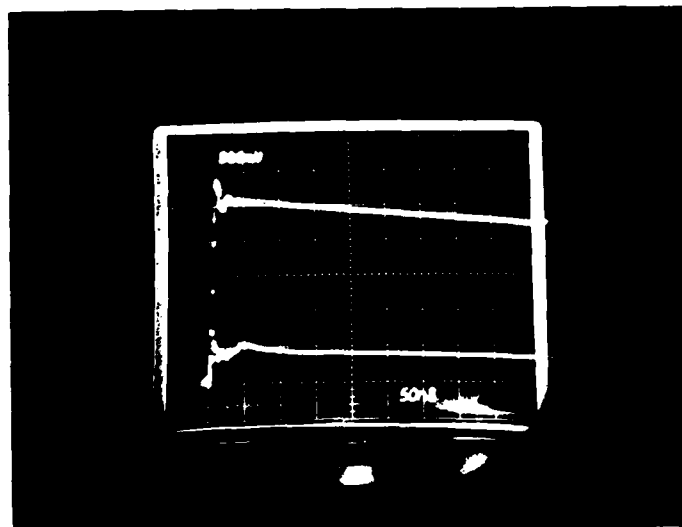
98

Date	5-23-85
Test Point	43-BL- 1/10-B
Amplification	0dB
Attenuation	0 dB
Horizontal	50 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	99
	50NS / DIV



99

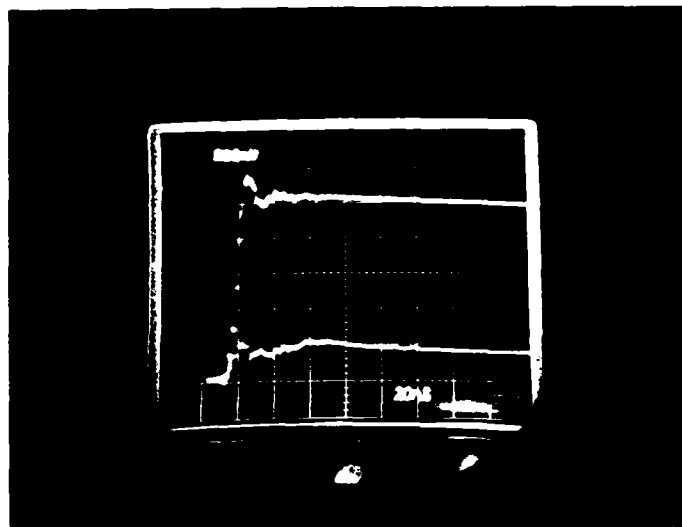
Date	5-23-85
Test Point	43R-BL- 1/10-B
Amplification	dB
Attenuation	dB
Horizontal	50 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	100



100

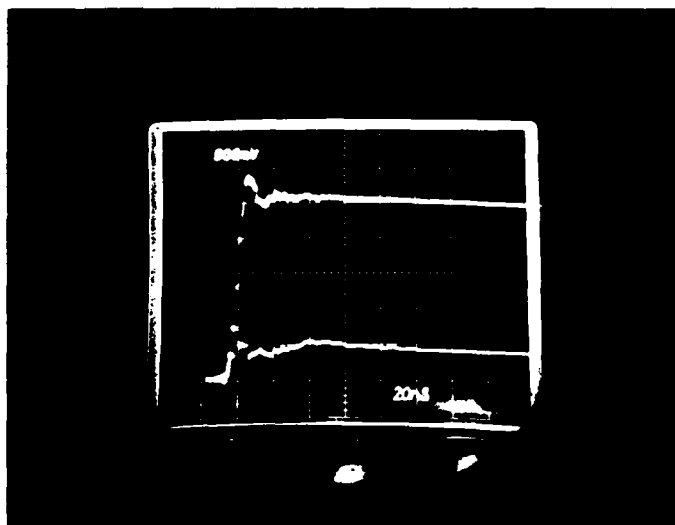


Date	5-23-85
Test Point	43-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	0.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	101
	20 NS/CM



101

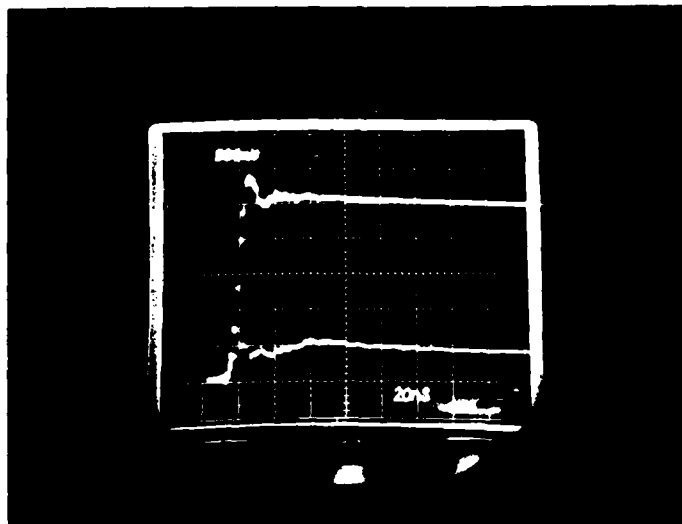
Date	5-23-85
Test Point	43R-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	0.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	102



102

Date **5-23-85**  
 Test Point **43-BL-1/10-D**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **30 ns/div 1**  
 Vertical **.5V(120V) mV/div 1**  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

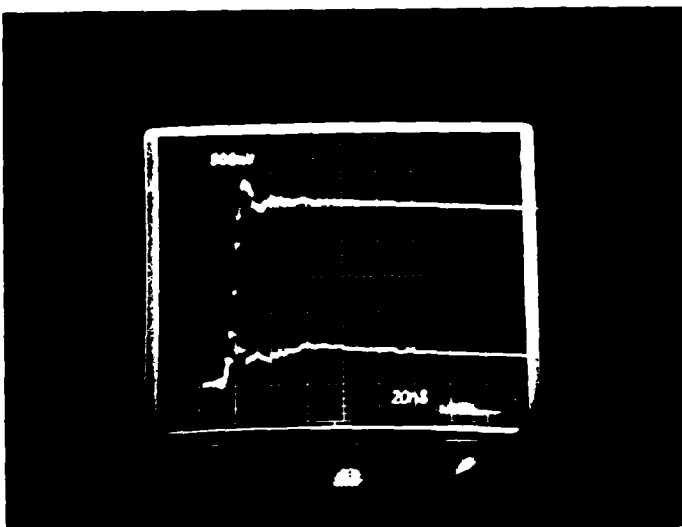
**103**



**103**

Date **5-23-85**  
 Test Point **43B-BL-1/10-D**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **20 ns/div 1**  
 Vertical **.5V(120V) mV/div 1**  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

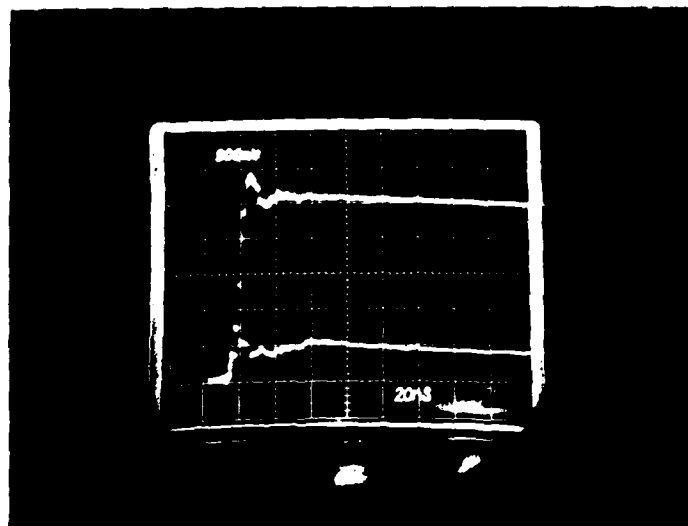
**104**



**104**

Date 5-23-85  
 Test Point 43-BL-40-E  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

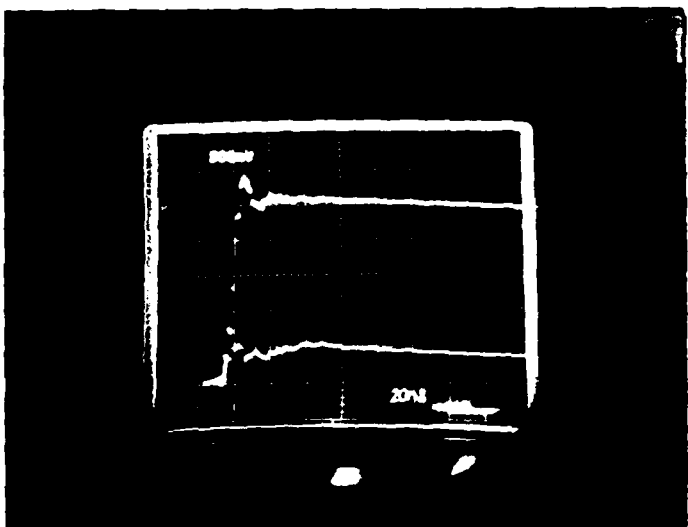
105



105

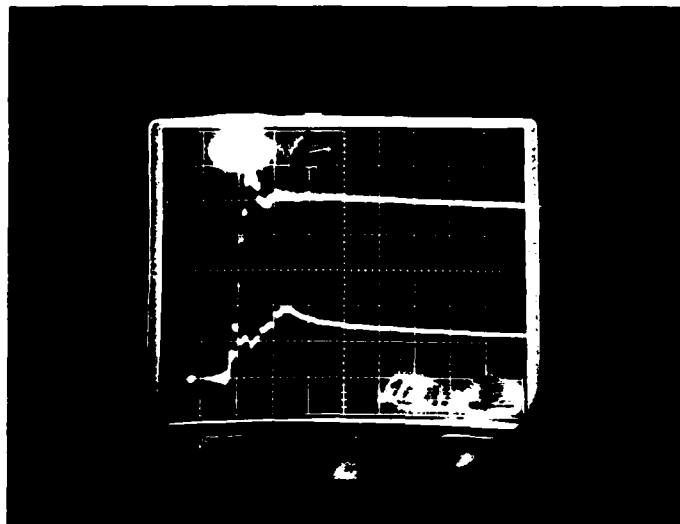
Date 5-23-85  
 Test Point 43R-BL-40-E  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal ns/div 1  
 Vertical mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level  
 Data Link  
 Comments:

106



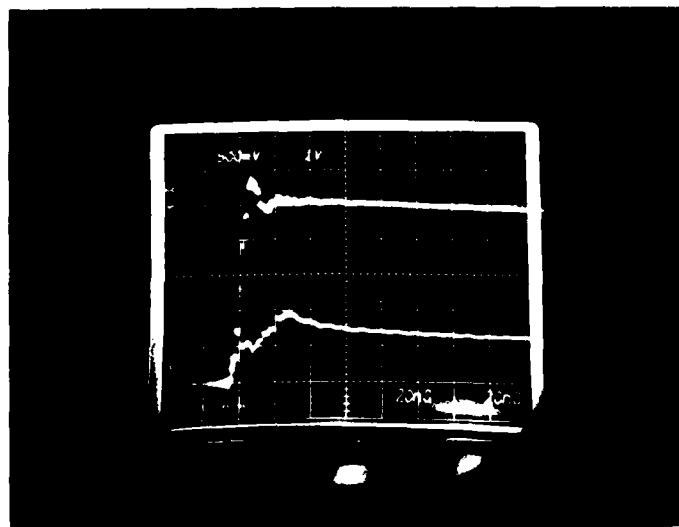
106

Date	5-24-85
Test Point	46-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	107



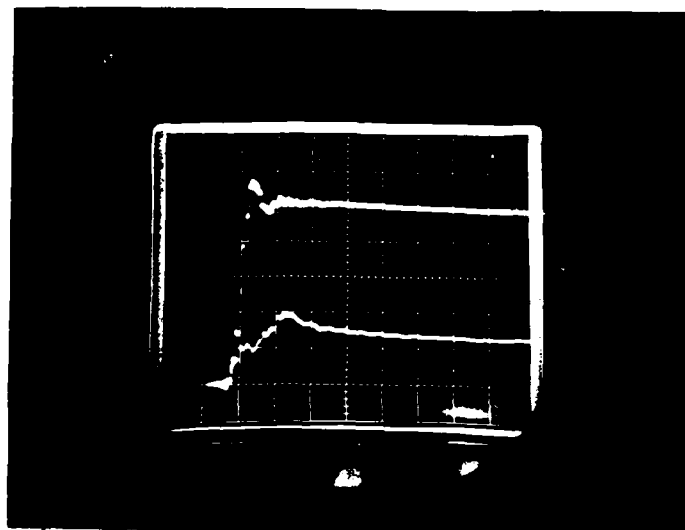
107

Date	5-24-85
Test Point	46R-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	108

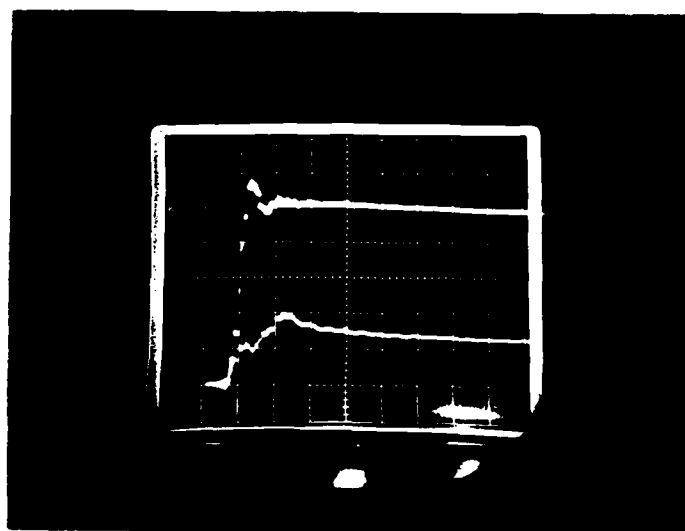


108

Date	5-24-85
Test Point	46-BL-1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	109

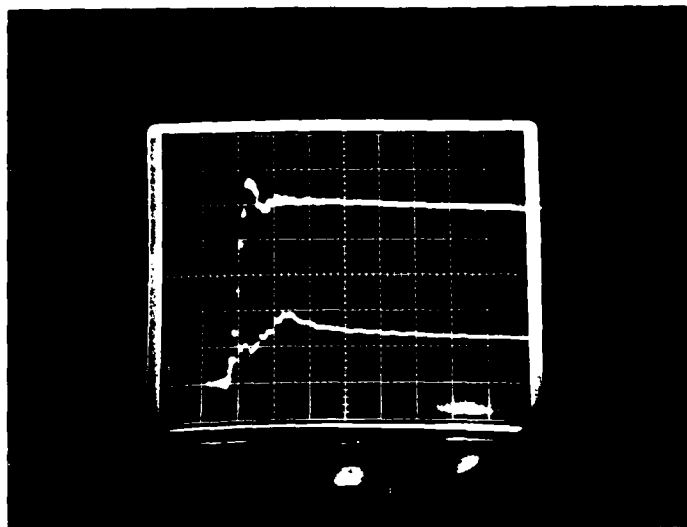


Date	5-24-85
Test Point	46R-BL-1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	110



Date 5-24-85  
 Test Point 46-BL-1/10-C  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) ~~mV~~/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

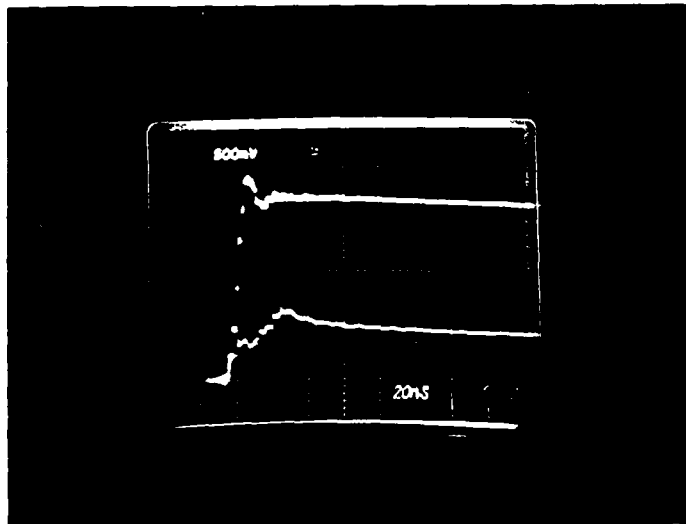
111



111

Date 5-24-85  
 Test Point 46R-BL-1/10-C  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

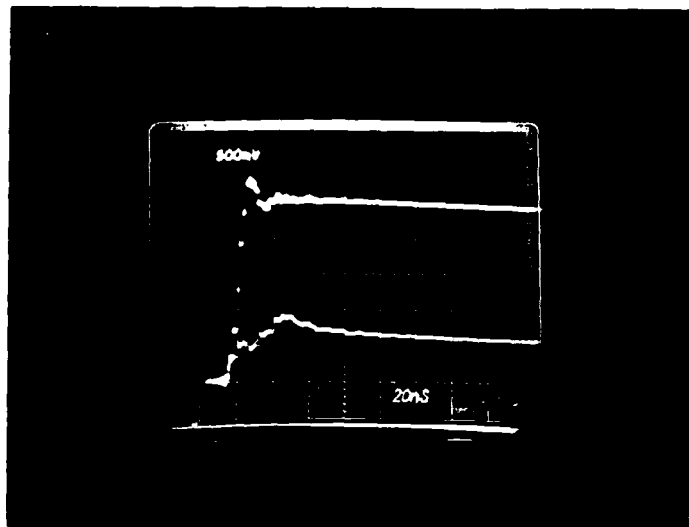
112



112

Date	5-24-85
Test Point	46-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

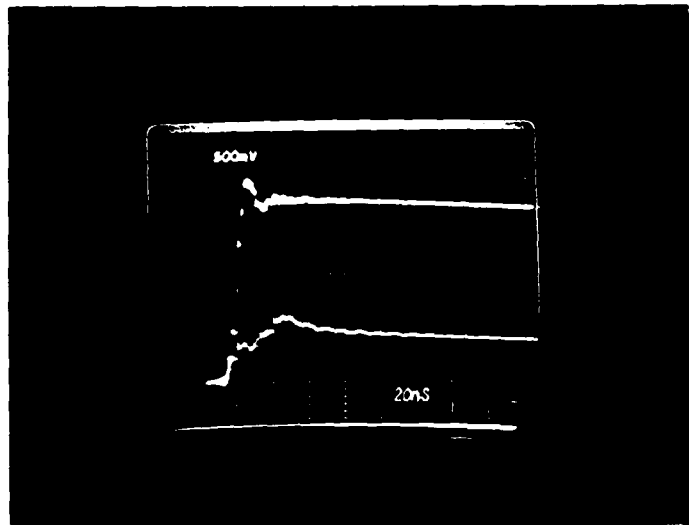
113



113

Date	5-24-85
Test Point	46R-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

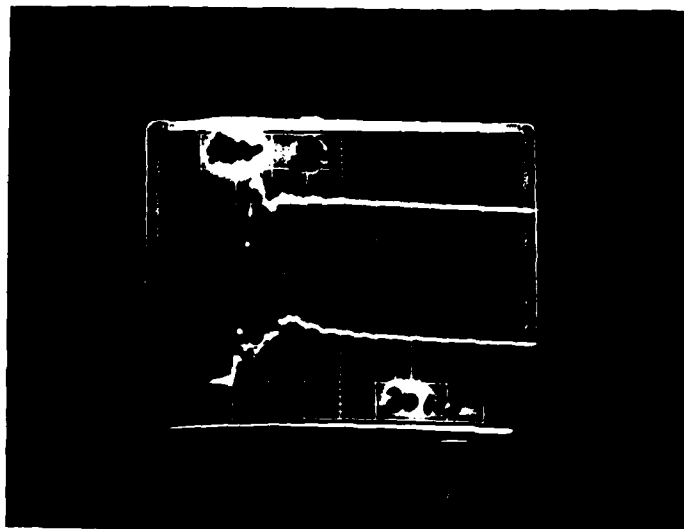
114



114

Date	5-24-85
Test Point	46-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

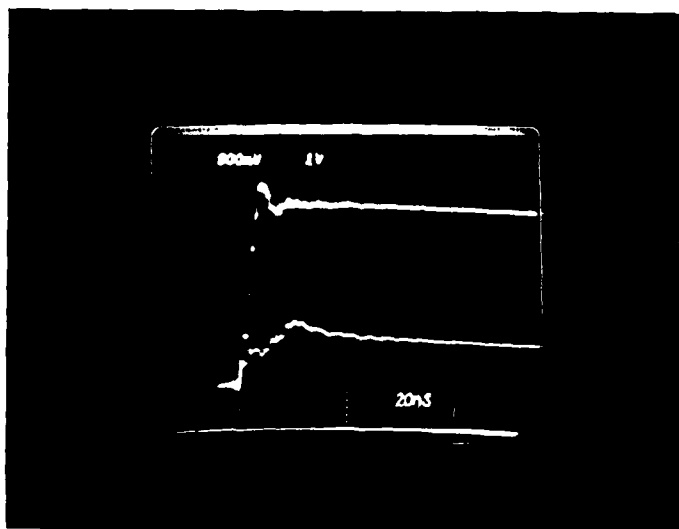
115



115

Date	5-24-85
Test Point	46R-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

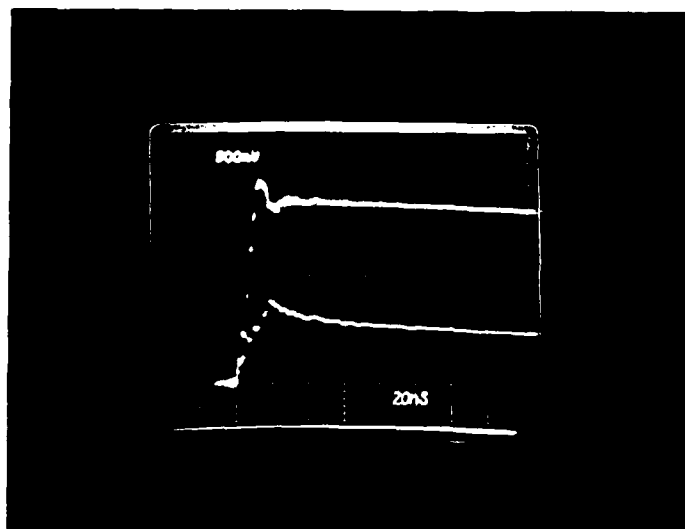
116



116

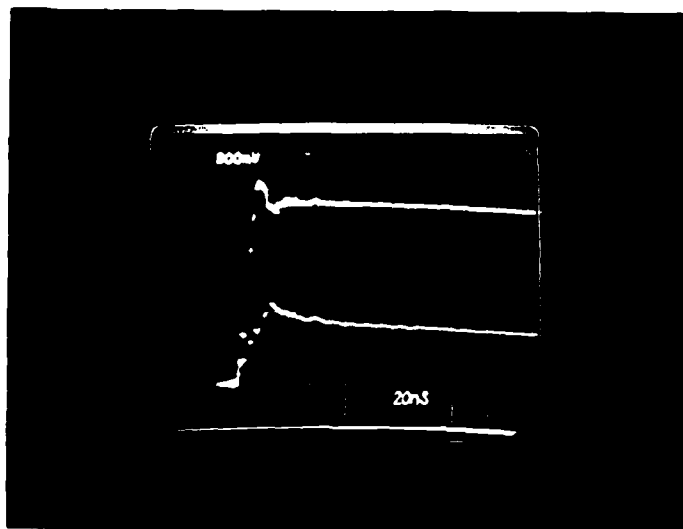


Date	5-24-85
Test Point	49-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	117



117

Date	5-24-85
Test Point	49R-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	118

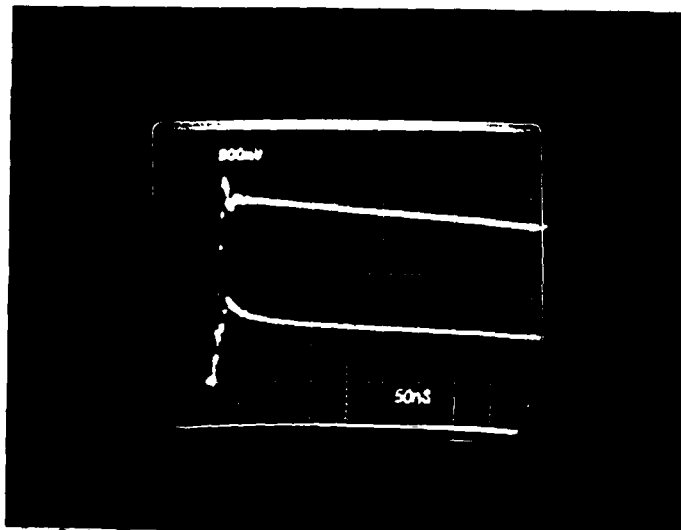


118

Date 4-24-85  
 Test Point 49-BL-1/10-B  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

119

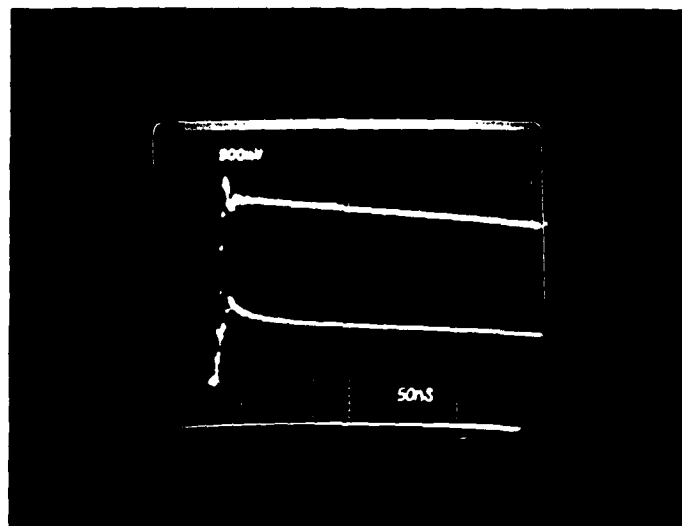
HORIZ = 50NS/



119

Date 4-24-85  
 Test Point 49R-BL-1/10-B  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level  
 Data Link  
 Comments:

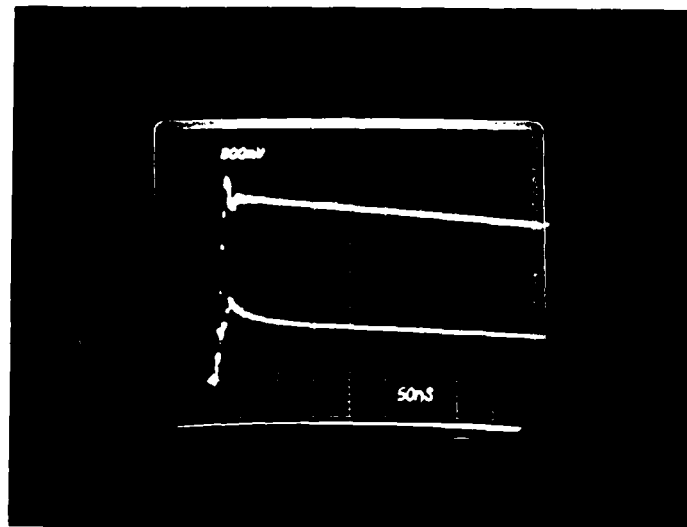
120



120

Date	5-24-85	
Test Point	49-BL-1/10-C	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	.5V (120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		
Comments:		

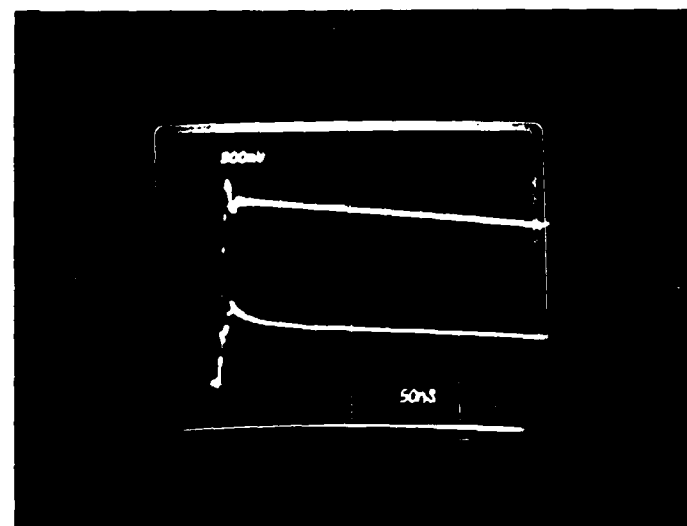
121



121

Date	5-24-85	
Test Point	49-BL-1/10-C	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	.5V (120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		
Comments:		

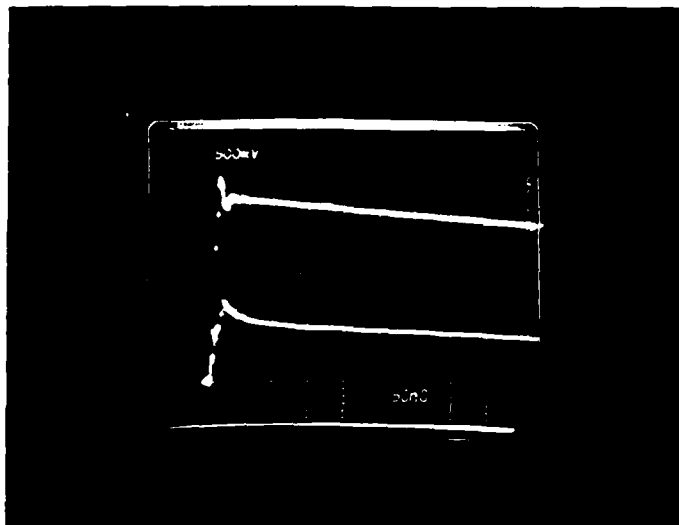
122



122

Date 5-24-85  
 Test Point 49-BL-1/10-D  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulser Level 600V  
 Data Link  
 Comments:

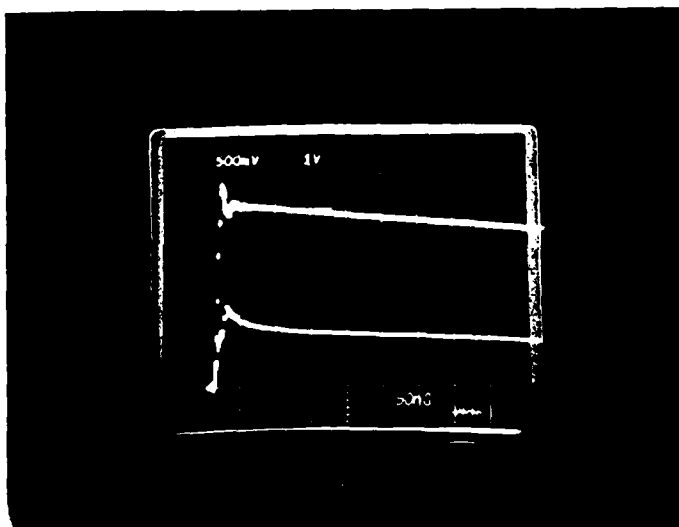
123



123

Date 5-24-85  
 Test Point 49R-BL-1/10-D  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulser Level 600V  
 Data Link  
 Comments:

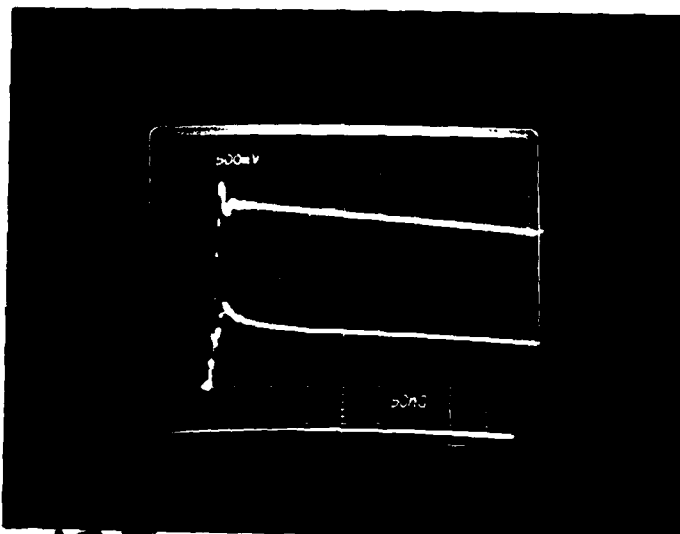
124



124

Date	5-24-85
Test Point	49-BL-1/10-E
Amplification	0dB
Attenuation	0dB
Horizontal	50 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	

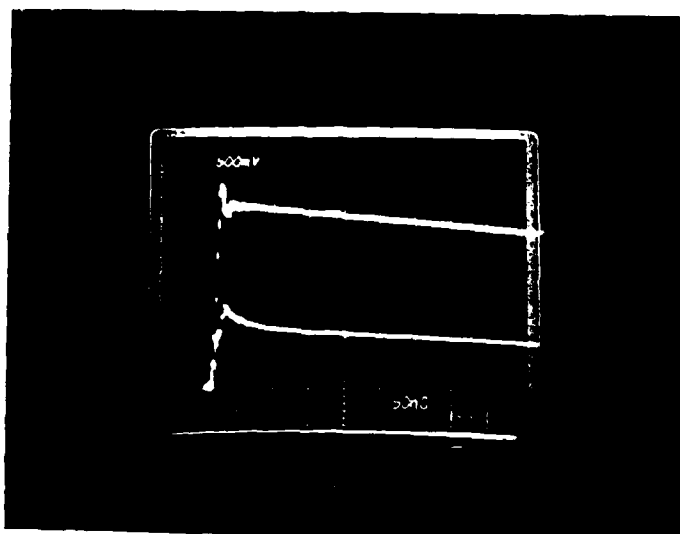
125



125

Date	5-24-85
Test Point	49R-BL-1/10-E
Amplification	0dB
Attenuation	0dB
Horizontal	50 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	

126

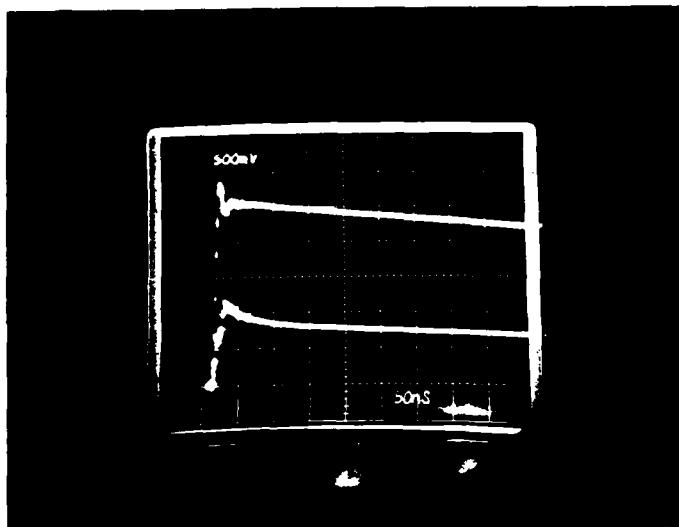


126

Date	5-24-85	
Test Point	49-BL-1/10-F	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		

Comments:

127

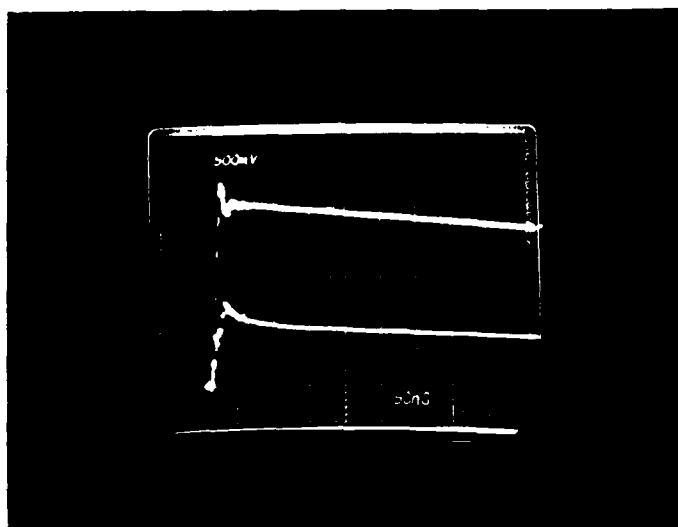


127

Date	5-24-85	
Test Point	49R-BL-1/10-F	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		

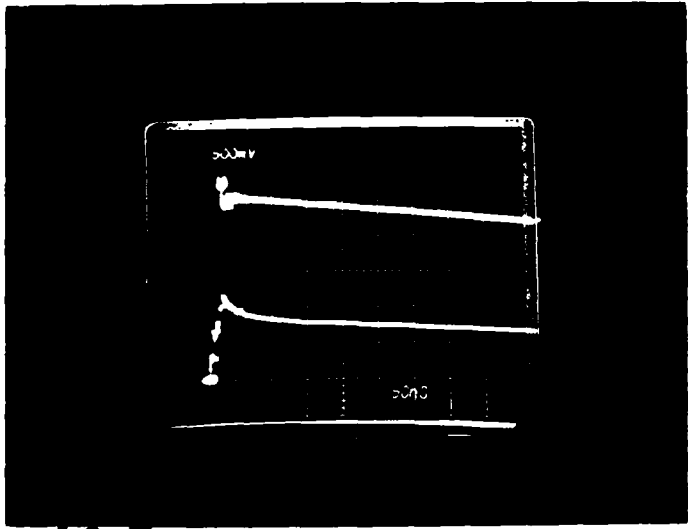
Comments:

128



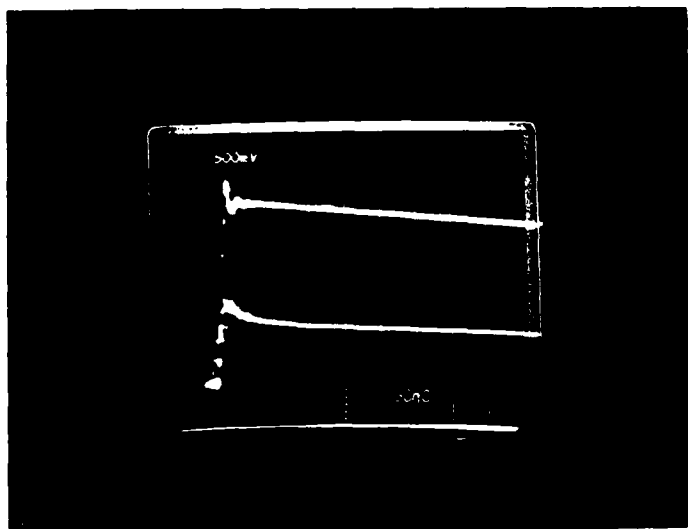
128

Date 5-24-85  
 Test Point 49-BL-1/p-G  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V (120V) ~~mv~~/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 129



129

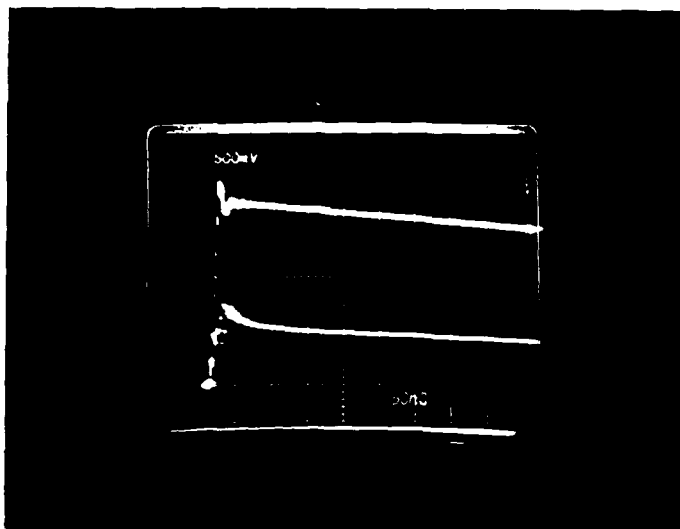
Date 5-24-85  
 Test Point 49R-BL-1/p-G  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V (120V) ~~mv~~/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 130



130

Date	5-24-85
Test Point	49-BL-1/10-H
Amplification	0 dB
Attenuation	0 dB
Horizontal	50 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Date Link	
Comments:	

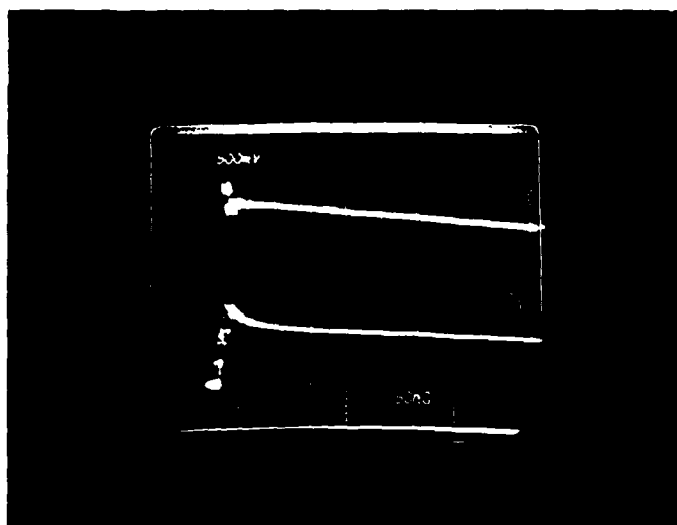
131



131

Date	5-24-85
Test Point	49R-BL-1/10-H
Amplification	0 dB
Attenuation	0 dB
Horizontal	50 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Date Link	
Comments:	

132



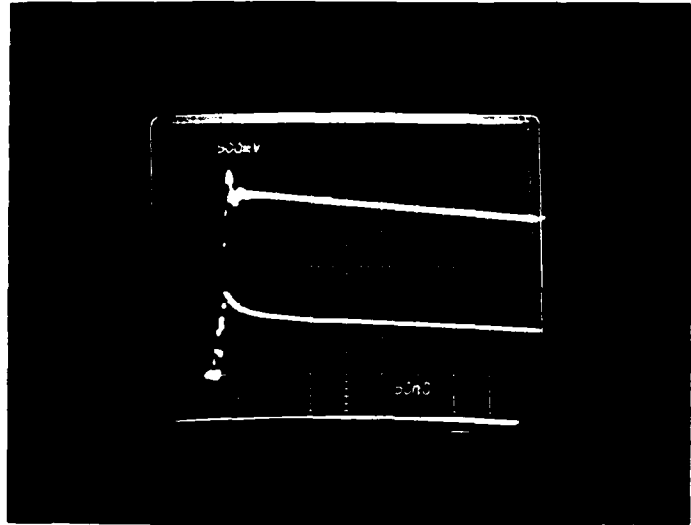
132



Date	5-24-85	
Test Point	49-BL-1/10-I	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		

Comments:

133

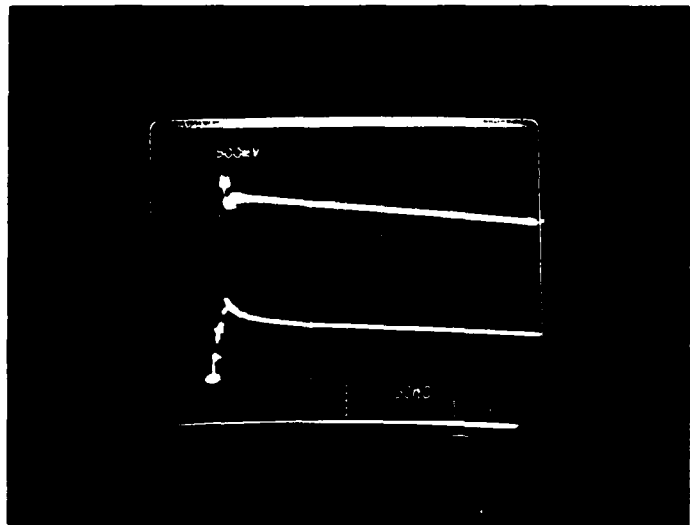


133

Date	5-24-85	
Test Point	49-BL-1/10-I	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		

Comments:

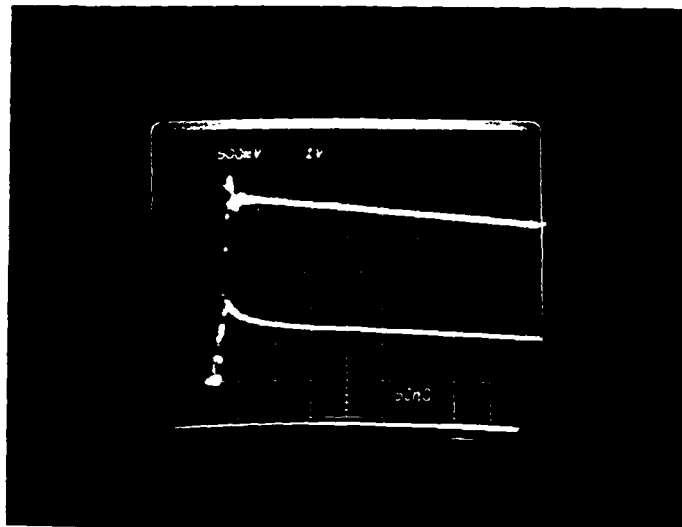
134



134

Date 5-24-85  
 Test Point 49-BL-1/10-J  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

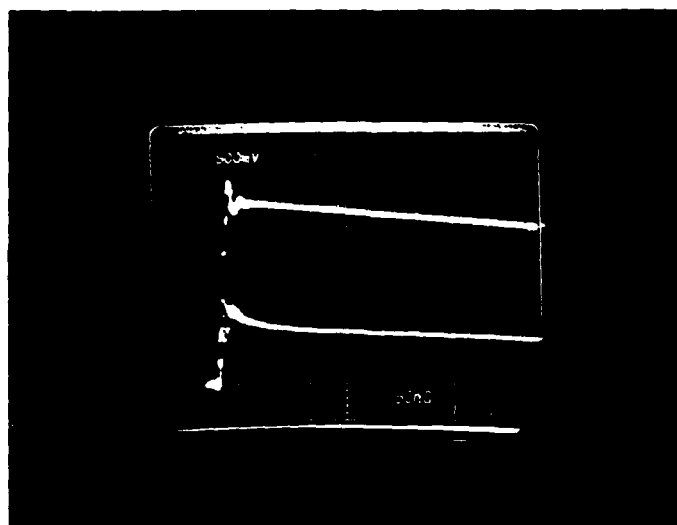
135



135

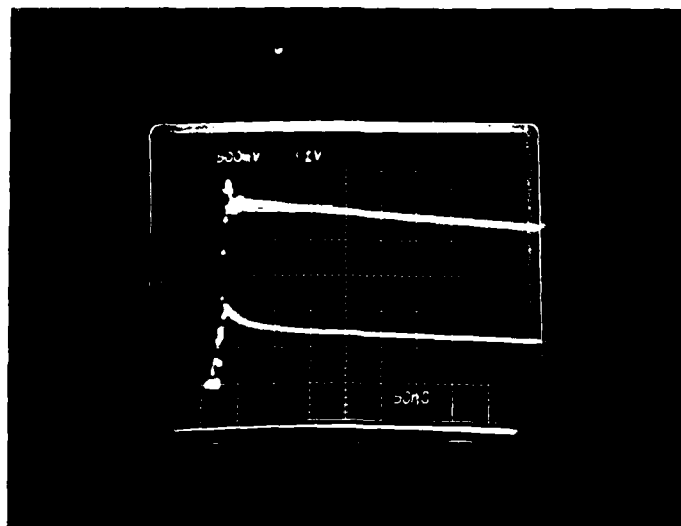
Date 5-24-85  
 Test Point 49R-BL-1/10-J  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

136



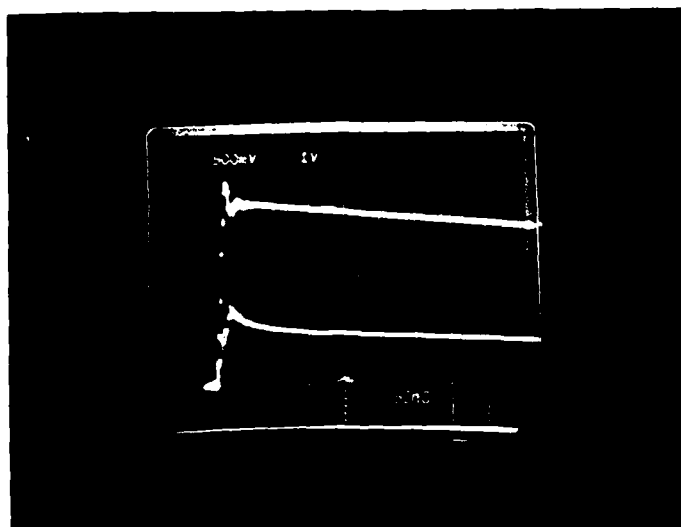
136

Date	5-24-85		
Test Point	49-BL-1/10K		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:	137		



137

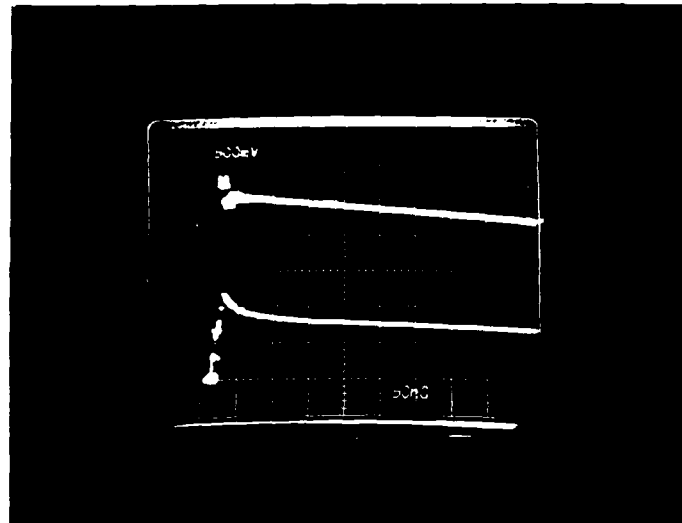
Date	5-24-85		
Test Point	49R-BL-1/10-K		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:	138		



138

Date	5-24-85	
Test Point	49-BL-1/10-L	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		
Comments:		

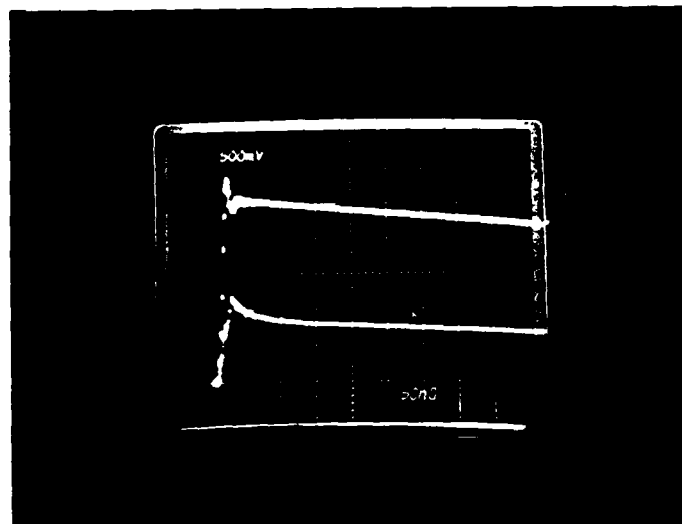
139



139

Date	5-24-85	
Test Point	49R-BL-1/10-L	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		
Comments:		

140



140

Date	5-24-85	
Test Point	55-BL-1/10-A	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	100	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulse Level	600V	
Data Link		
Comments:	157	
HORIZ.=100NS/		

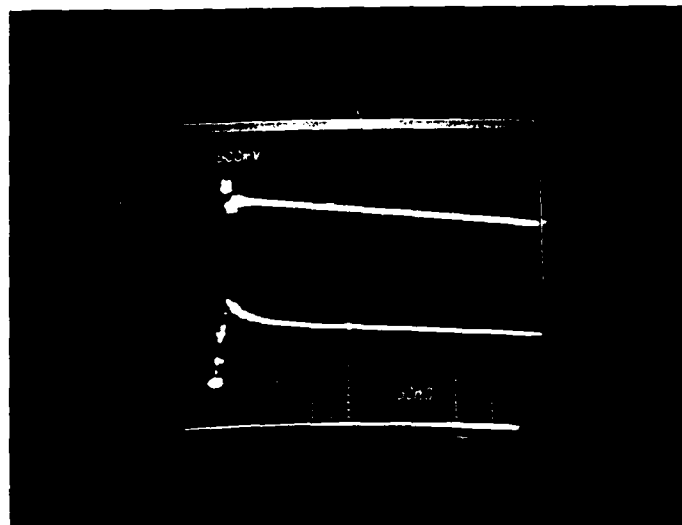


Date	5-24-85	
Test Point	55R-BL-1/10-A	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	100	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulse Level	600V	
Data Link		
Comments:	158	

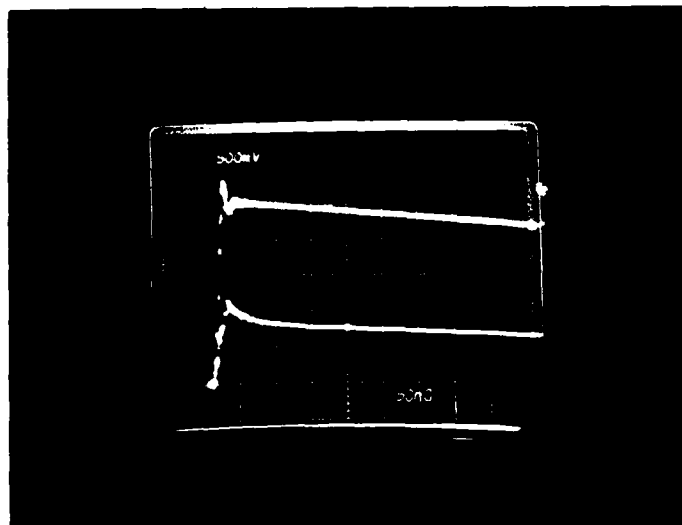


158

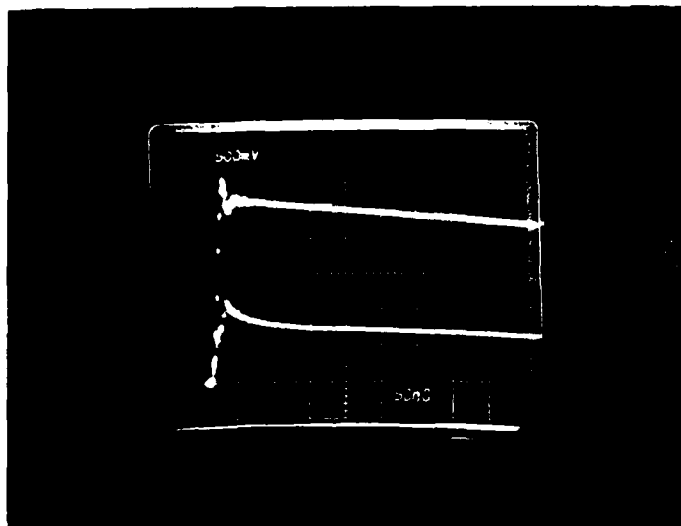
Date	5-24-85		
Test Point	49-BL-1/10-M		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:	141		



Date	5-24-85		
Test Point	49R-BL-1/10-M		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:	142		

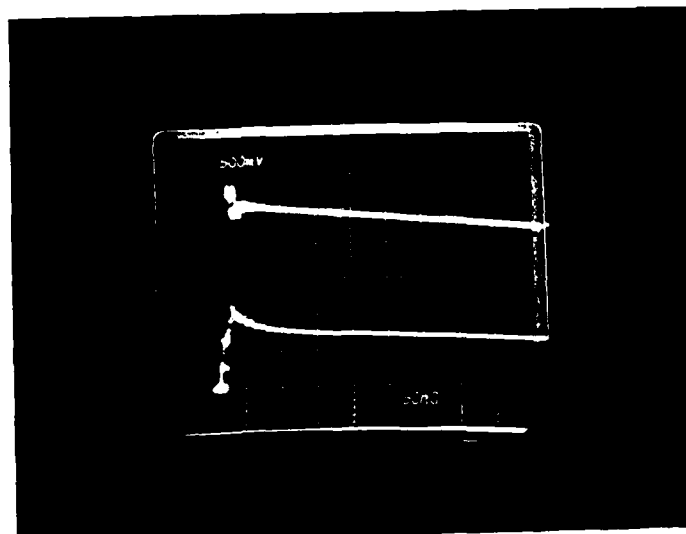


Date	5-24-85	
Test Point	49-BL-1/10-N	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		
Comments:	143	



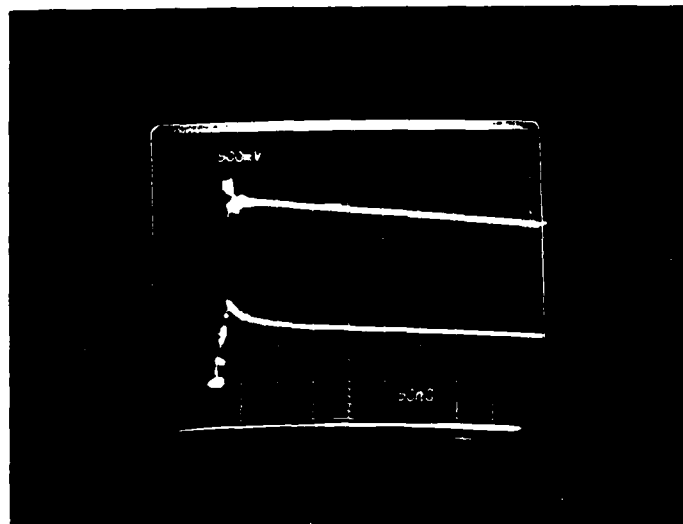
143

Date	5-24-85	
Test Point	49R-BL-1/10-N	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		
Comments:	144	



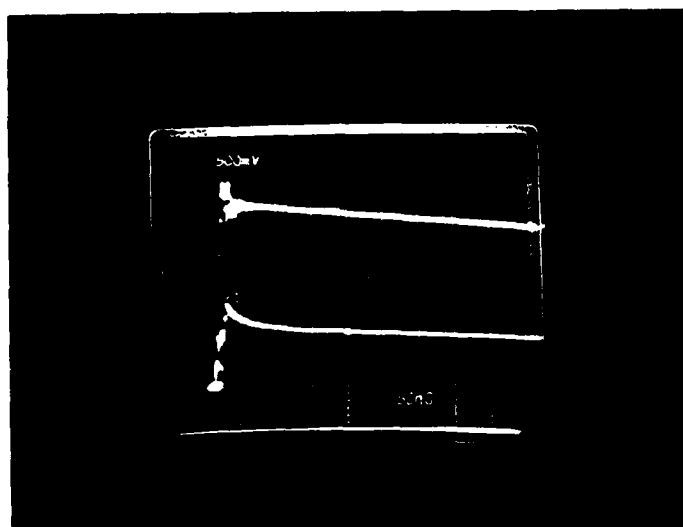
144

Date	5-24-85		
Test Point	49-BL-1/10-0		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:	145		



145

Date	5-24-85		
Test Point	49R-BL-1/10-0		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:	146		



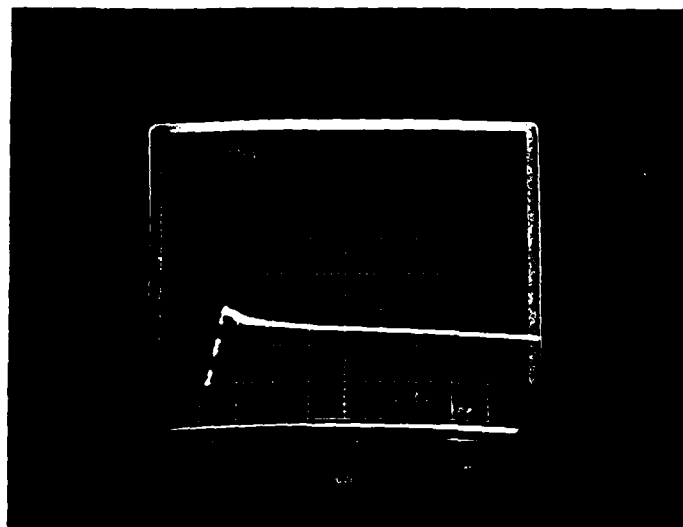
146



Date	5-24-85	
Test Point	49-BL-1/10 - P +	
Amplification	0	dB
Attenuation	0	dB
Horizontal	50	ns/div 1
Vertical	.5V (120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		
Comments:		

167

1 "BEAD" ADDED

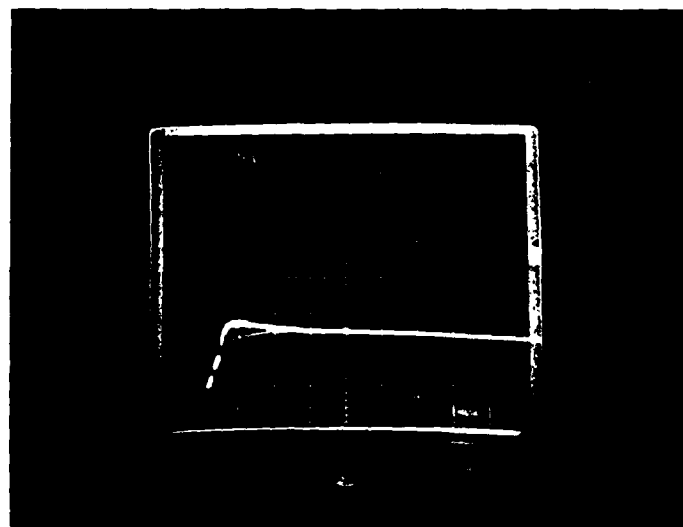


167

Date		
Test Point	49-BL-1/10 - P +	
Amplification	0	dB
Attenuation	0	dB
Horizontal	50	ns/div 1
Vertical	.5V (120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		
Comments:		

168

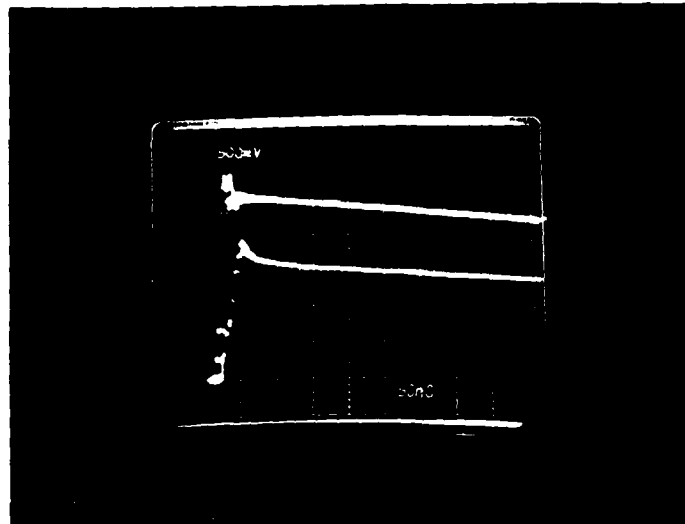
3 "BEADS" ADDED



168

Date 5-24-85  
 Test Point 52-BL-1/10-A  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

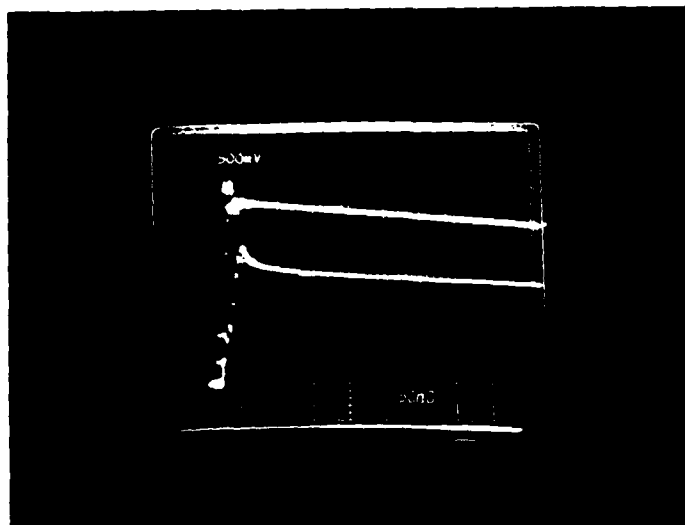
147



147

Date 5-24-85  
 Test Point 52R-BL-1/10-A  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

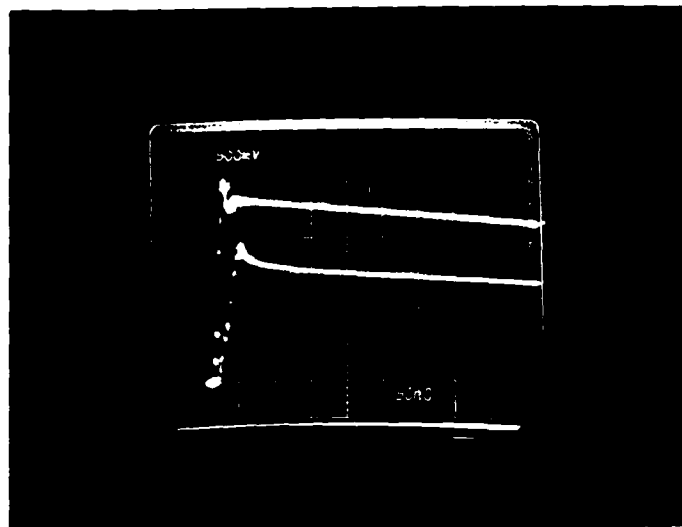
148



148

Date	5-24-85		
Test Point	52-BL-1/10-B		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:			

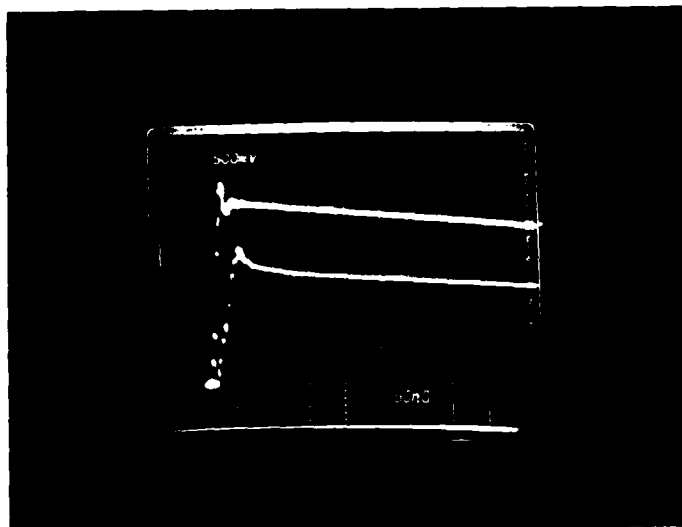
149



149

Date	5-24-85		
Test Point	52R-BL-1/10-B		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:			

150

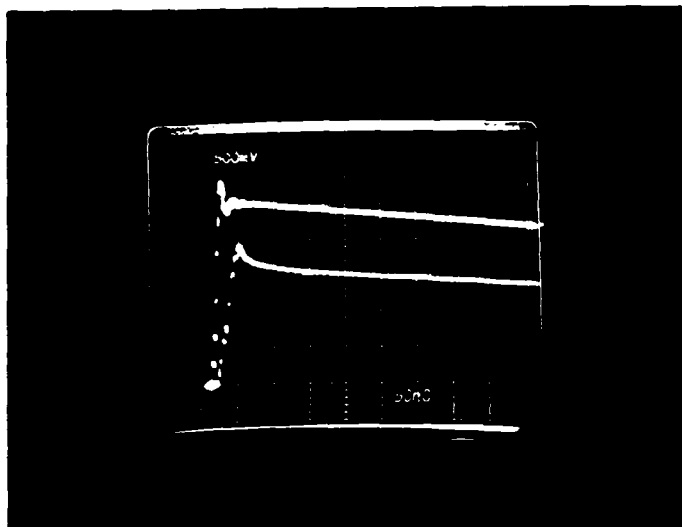


150

Date 5-24-85  
 Test Point 52-BL-1/10-C  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link

Comments:

151

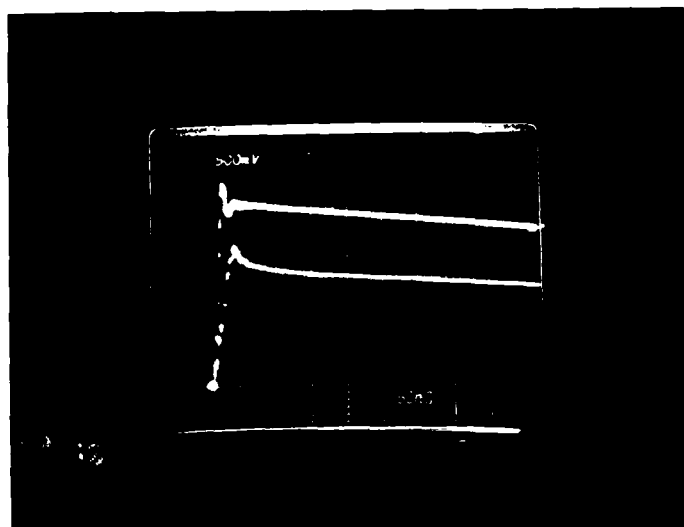


151

Date 5-24-85  
 Test Point 52R-BL-1/10-C  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link

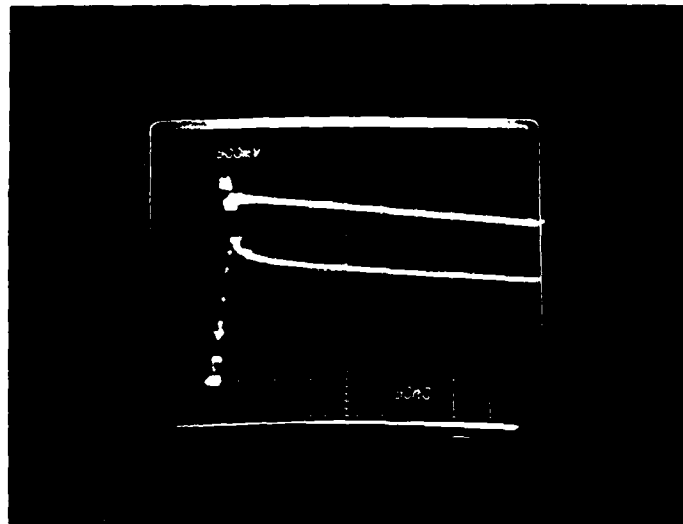
Comments:

152



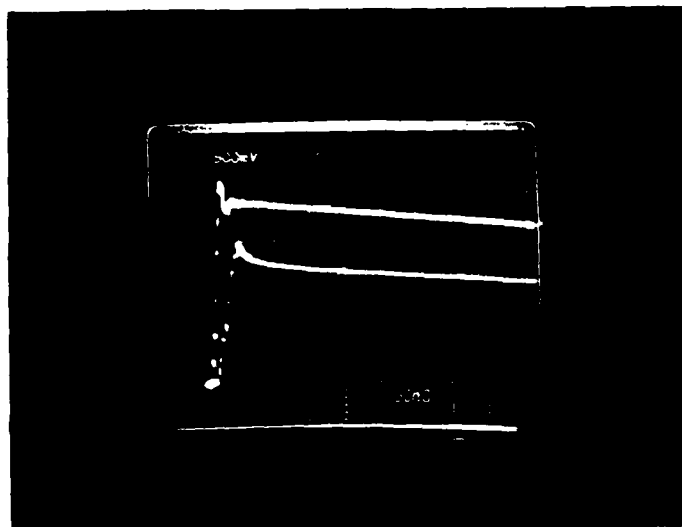
152

Date	5-24-85
Test Point	52-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	50 ns/div 1
Vertical	5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	153



153

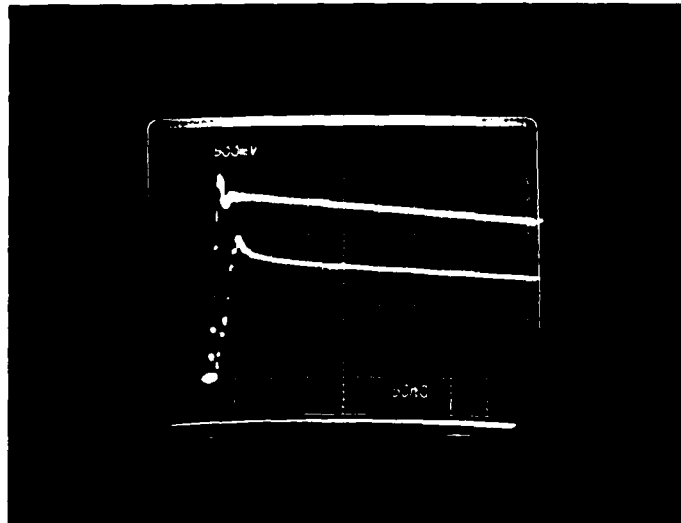
Date	5-24-85
Test Point	52R-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	50 ns/div 1
Vertical	5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	154



154

Date	5-24-85		
Test Point	52-BL-1/10-E		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:			

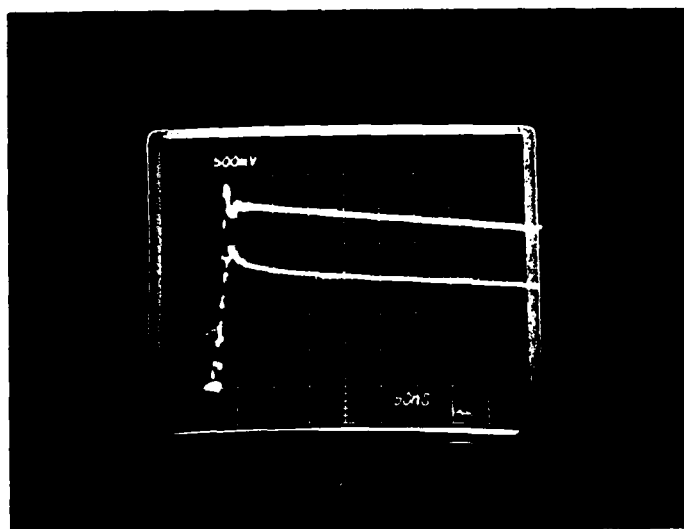
155



155

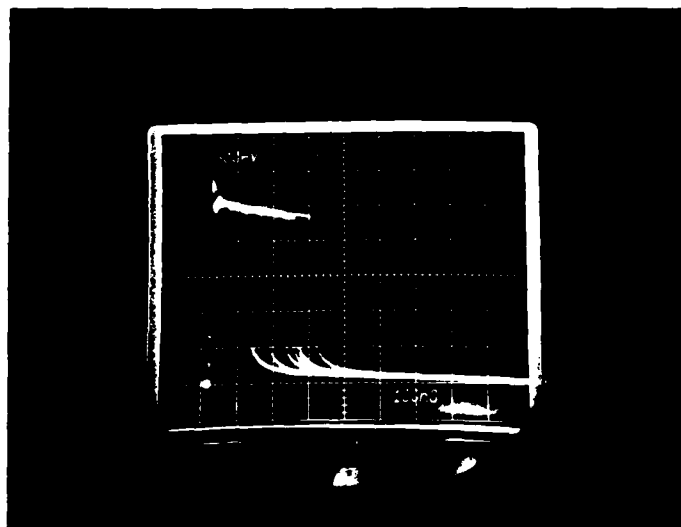
Date	5-24-85		
Test Point	52R-BL-1/10-E		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:			

156



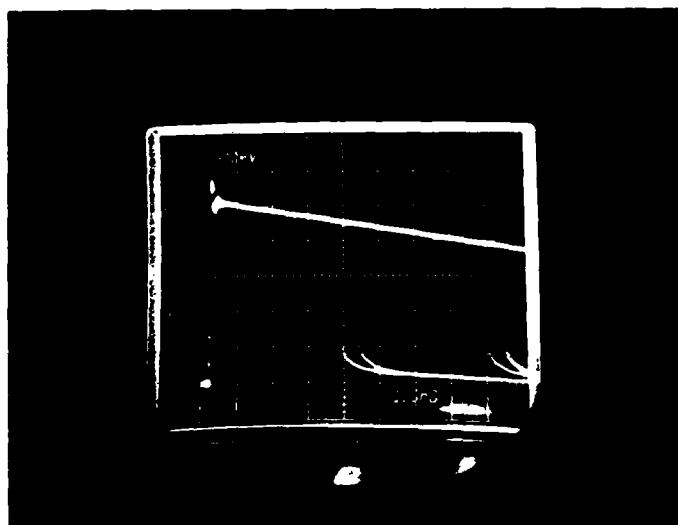
156

Date	5-24-85
Test Point	55-BL-1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	100 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	159



159

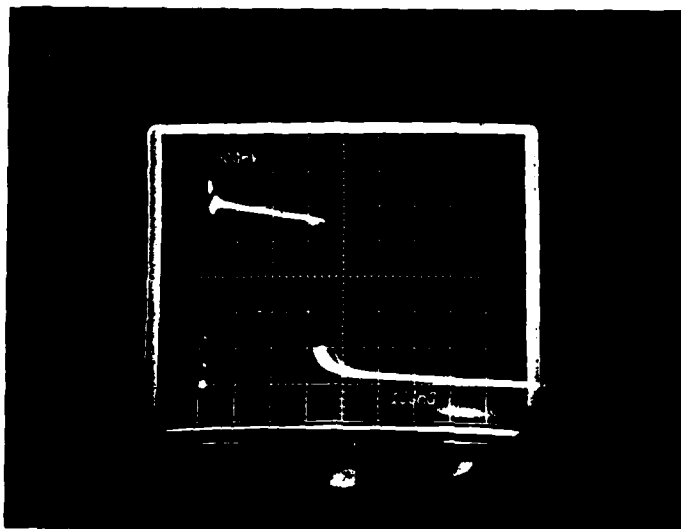
Date	5-24-85
Test Point	55R-BL-1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	100 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	160



160

Date	5-24-85
Test Point	55-BL-1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	100 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

161

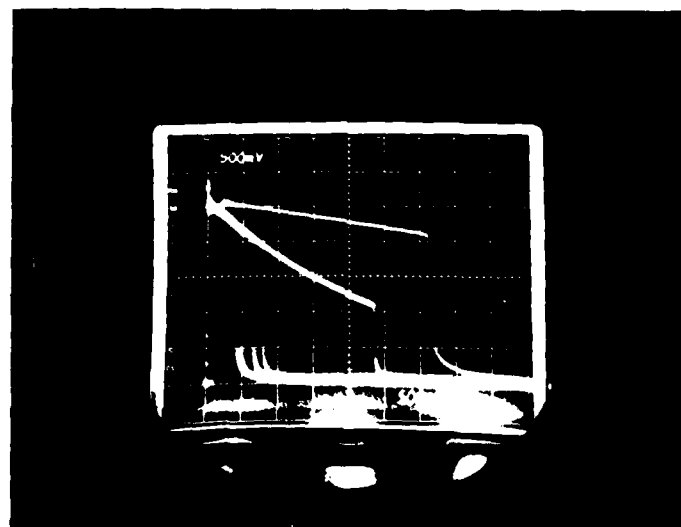


161

Date	
Test Point	53R-BL-1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	500 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	
Data Link	
Comments:	

162

500ns/

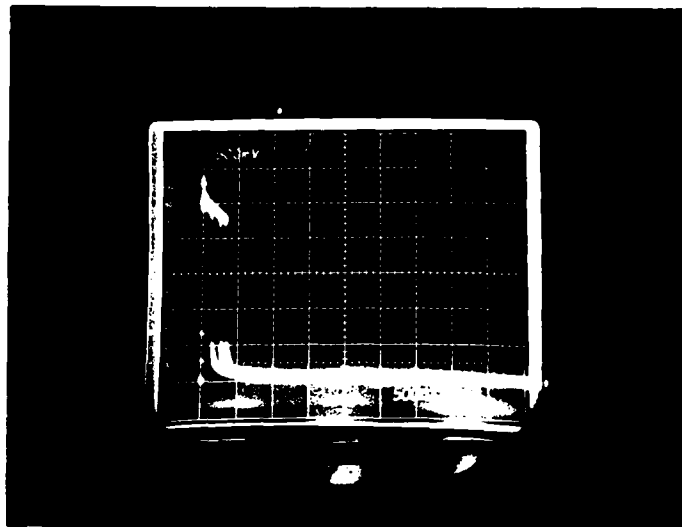


162



Date	5-24-85	
Test Point	55-BL-1/10-B	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	500	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		
Comments:		

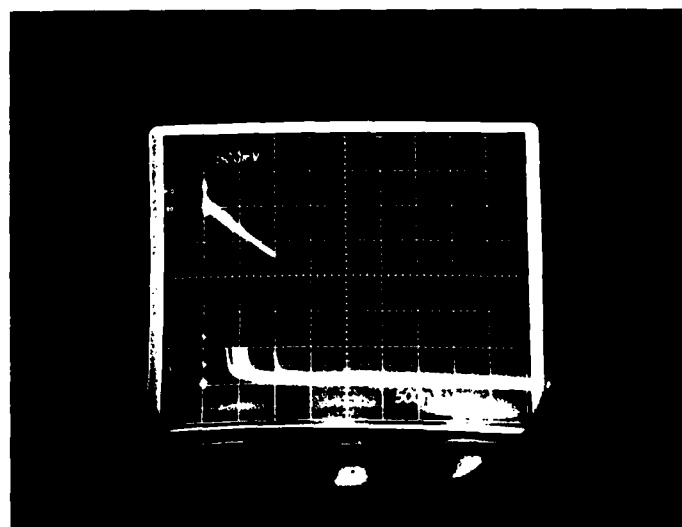
163



163

Date		
Test Point	55R-BL-1/10-B	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	500	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600	
Data Link		
Comments:		

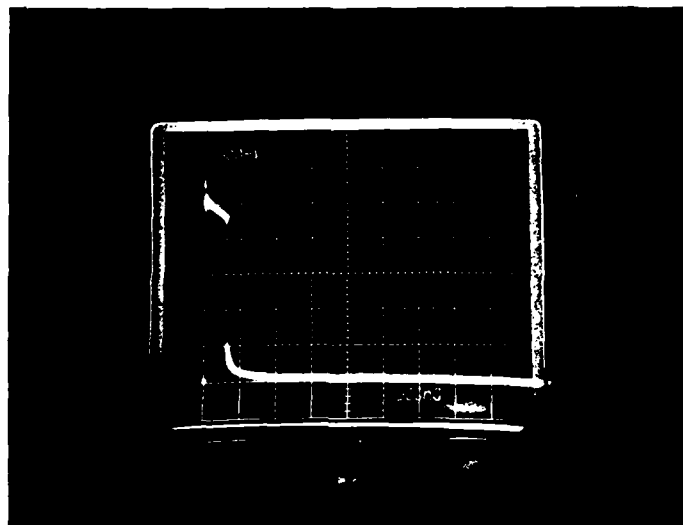
164



164

Date 5-24-85  
 Test Point 55-BL-1/4-B  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 500 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

163

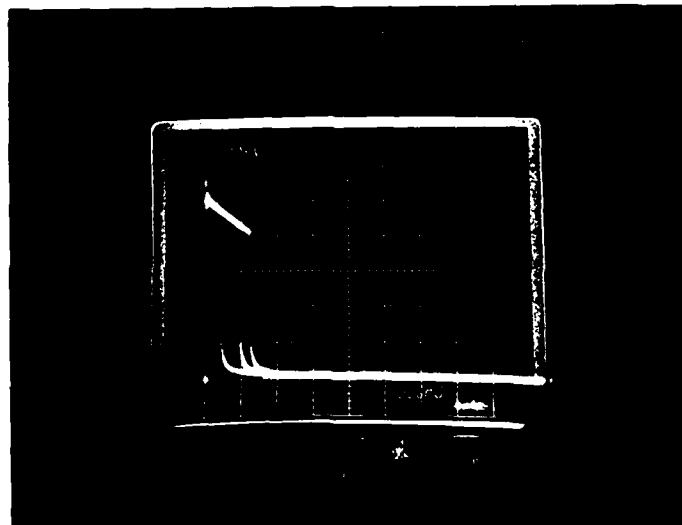


163

PULSE RATE SLOWED TO 4/4 SEC (4 PULSES)

Date  
 Test Point 55R-BL-1/4-B  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 500 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

164



164

PULSE RATE SLOWED TO 4/4 SEC (4 PULSES)

AD-A164 435

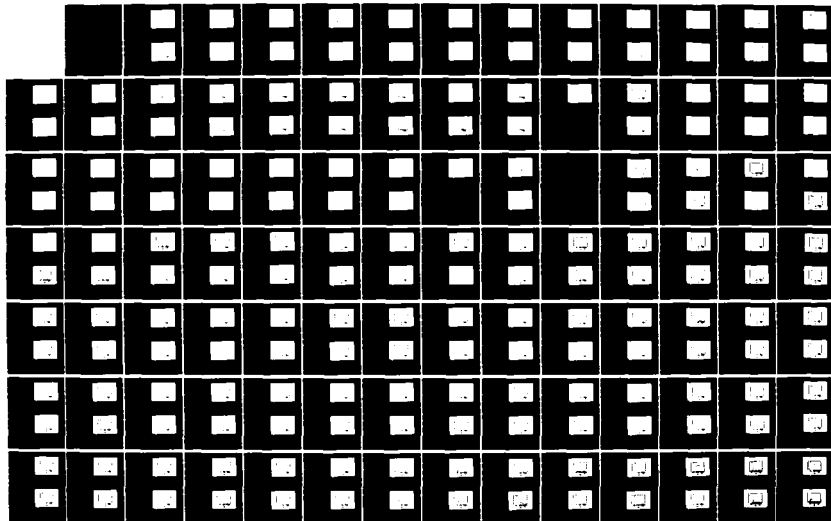
ELECTROMAGNETIC PULSE/TRANSIENT THREAT TESTING OF  
PROTECTION DEVICES FOR. (U) ELECTROSPACE SYSTEMS INC  
ARLINGTON VA D BODSON ET AL 31 OCT 85

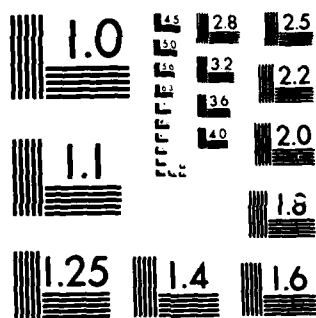
2/3

UNCLASSIFIED

NCS-T18-85-10-VOL-3-SEC-4 DCA100-85-C-0010 F/B 20/14

NL



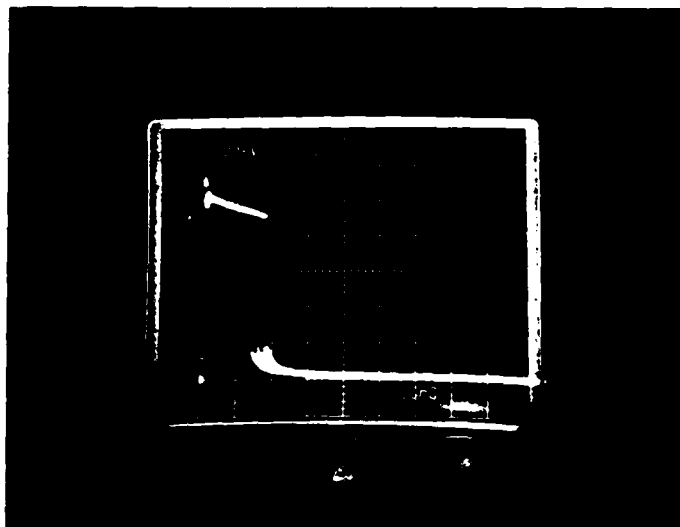


MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

Date	5-24-85
Test Point	55-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	200 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	

200NS/

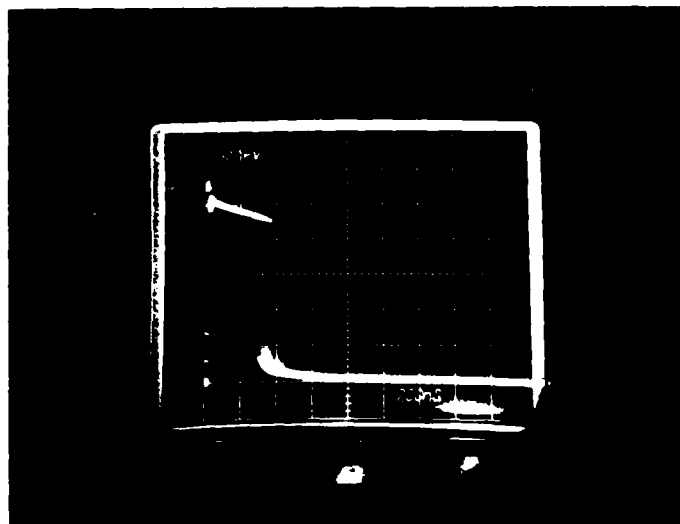
165



165

Date	5-24-85
Test Point	55R-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	200 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	

166

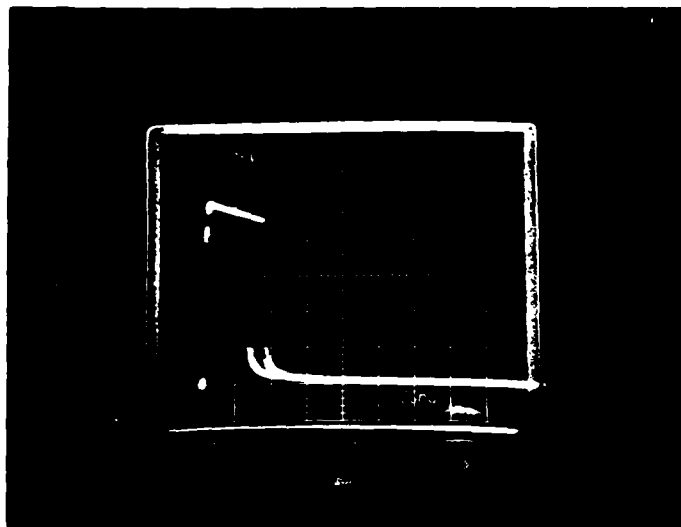


166

Date	5-24-85	
Test Point	55-BL-1/10-C+	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	200	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulse Level	600V	
Data Link		
Comments:		

169

3"BEADS"

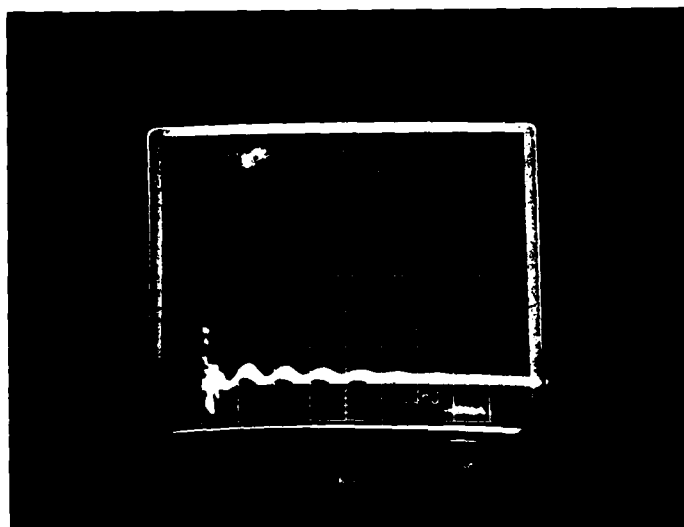


169

Date		
Test Point	55-BL-1/10-C+	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	200	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulse Level	600V	
Data Link		
Comments:		

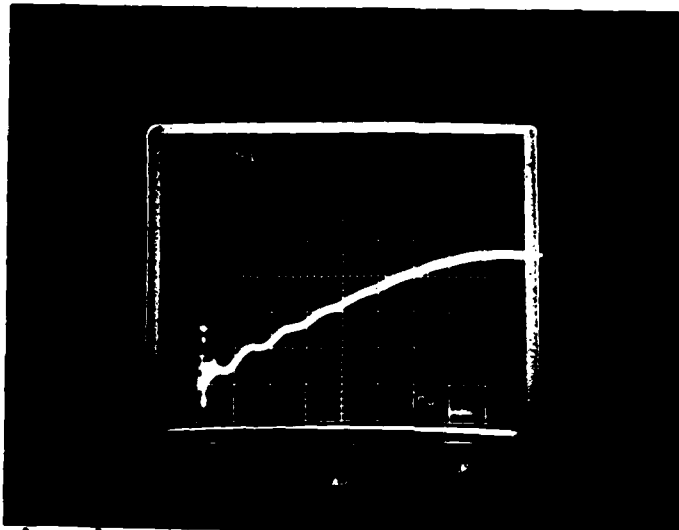
170

LARGE INDUCTOR ADDED



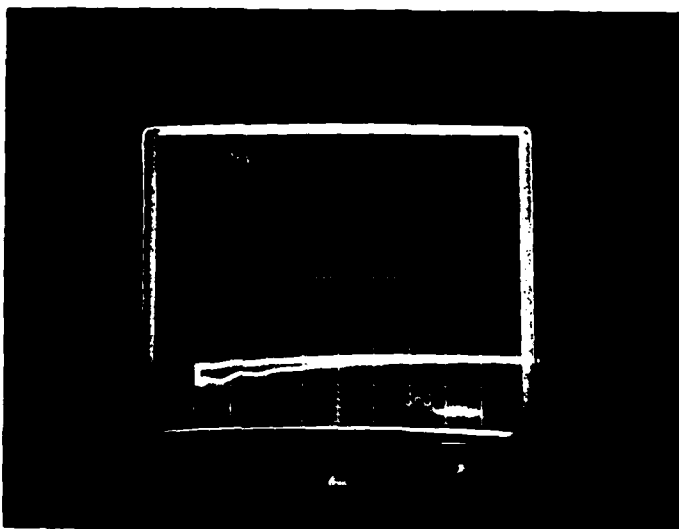
170

Date 5-24-85  
 Test Point REF of LG / INDUCTOR  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 200 ns/div 1  
 Vertical .5V (120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 171



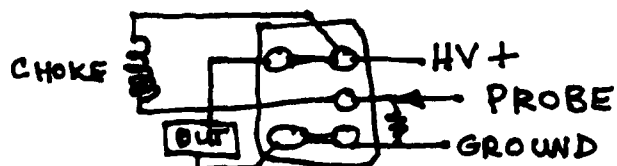
171

Date  
 Test Point 49-BL-Y10-P  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 200 ns/div 1  
 Vertical .5V (120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 172



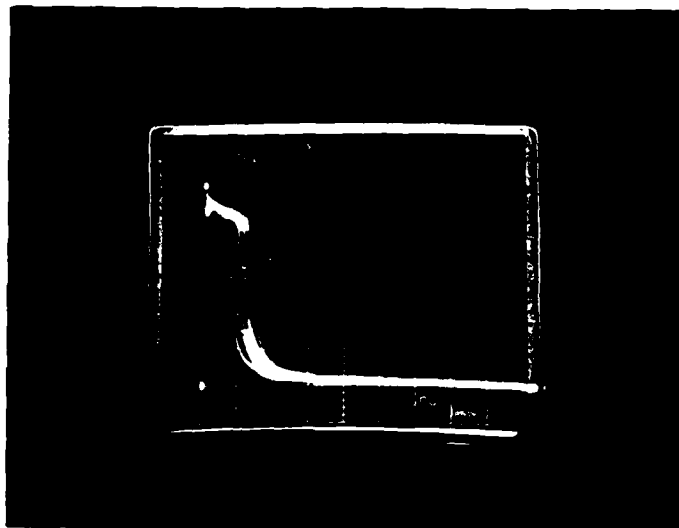
172

SET UP FOR 167-172:



Date	5-24-85
Test Point	55-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	200 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	

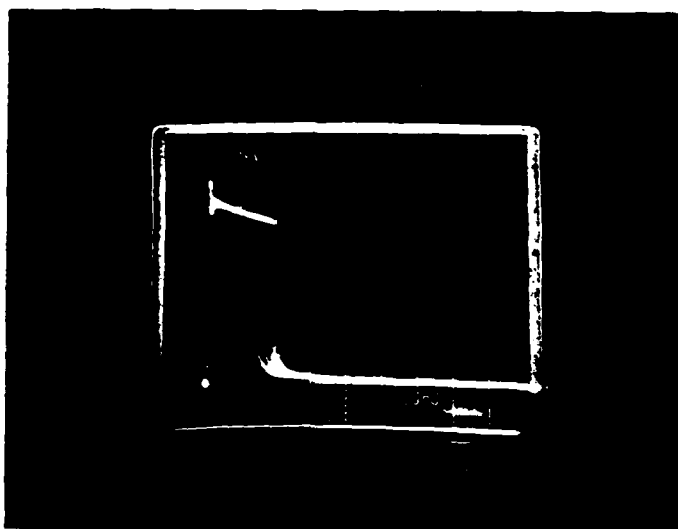
173



173

Date	5-24-85
Test Point	55R-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	200 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	

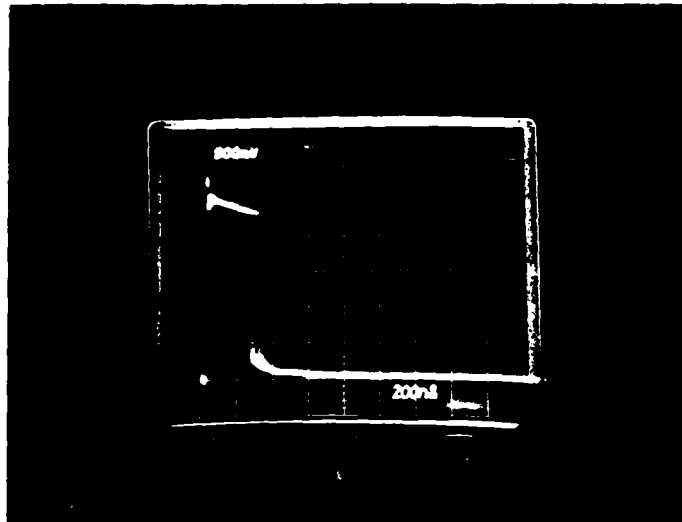
174



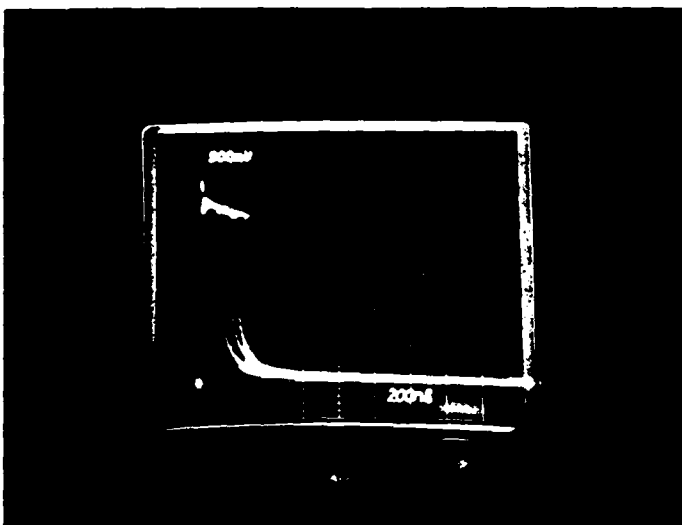
174



Date	5-24-85
Test Point	55-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	200 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	175

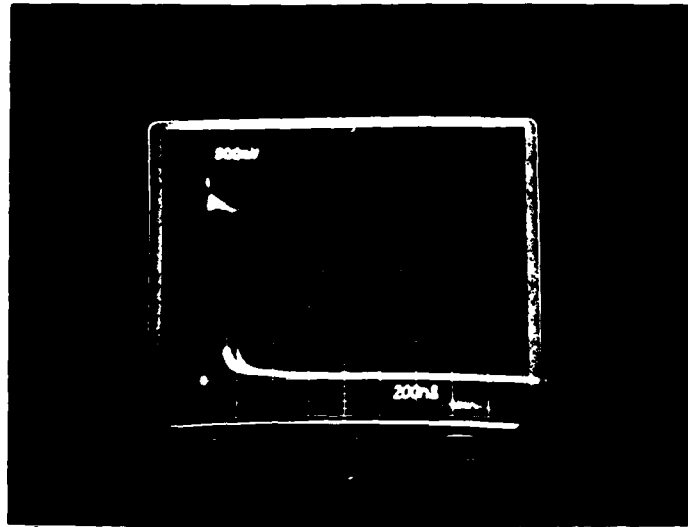


Date	5-24-85
Test Point	53R-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	200 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	176



Date 5-24-85  
 Test Point 58-BL-1/10-A  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 200 ns/div 1  
 Vertical .5V (120V) ~~ns~~/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

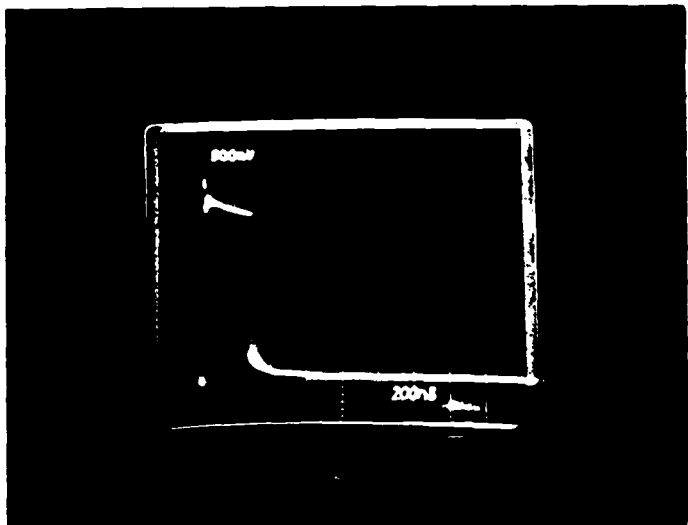
177



177

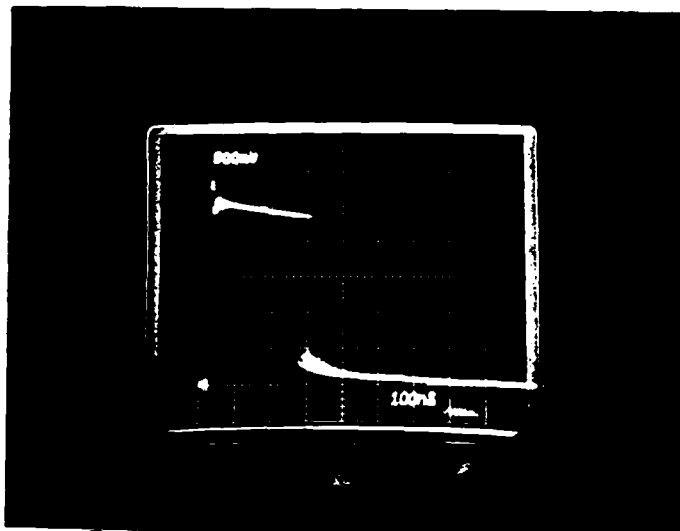
Date 5-24-85  
 Test Point 58R-BL-1/10-A  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 200 ns/div 1  
 Vertical .5V (120V) ~~ns~~/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

178



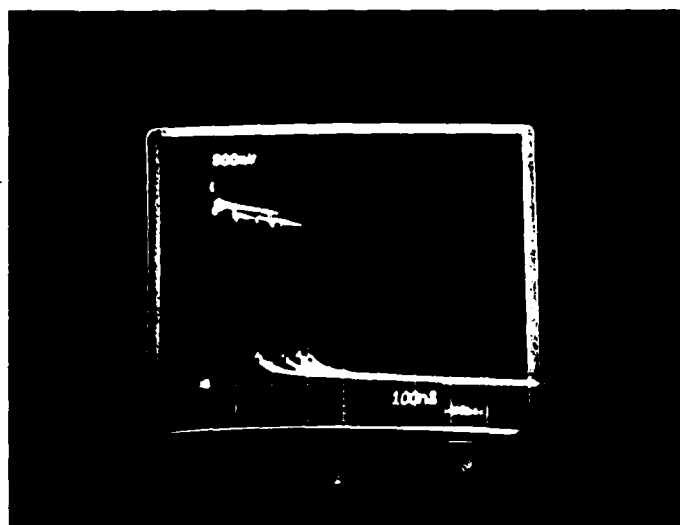
178

Date	5-24-85
Test Point	58-BL-1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	100 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	179
	100NS/



179

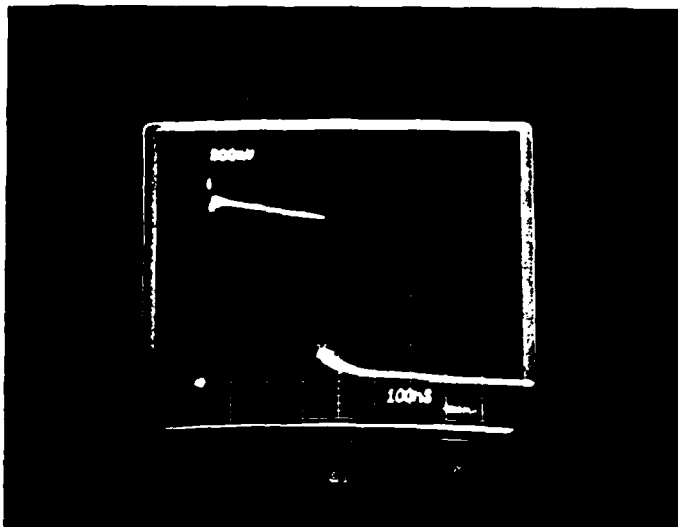
Date	5-24-85
Test Point	58R-BL-1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	100 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	180



180

Date 5-24-85  
 Test Point 58-BL-1/10-C  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 100 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

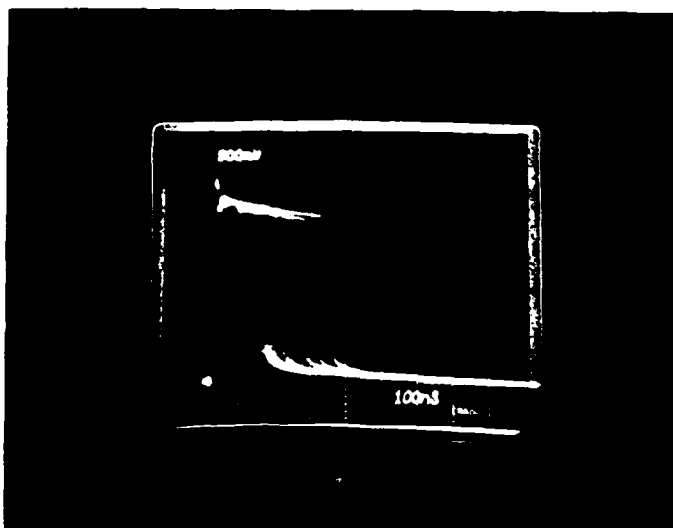
181



181

Date 5-24-85  
 Test Point 58R-BL-1/10-C  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 100 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

182

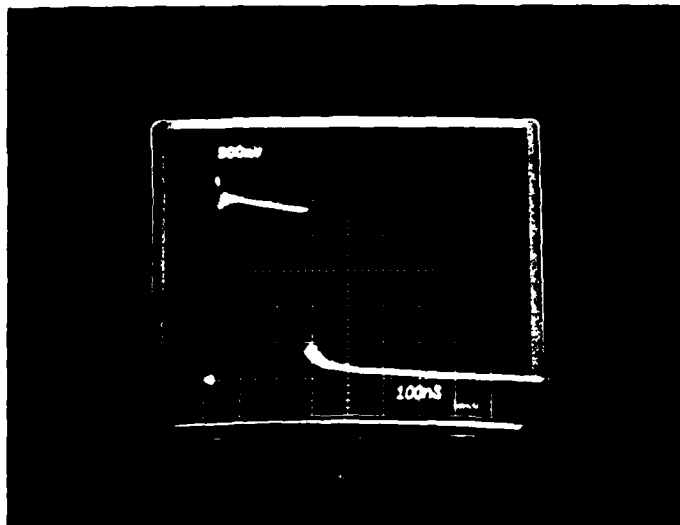


182

Date	5-24-85
Test Point	58-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	100 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	

Comments:

183

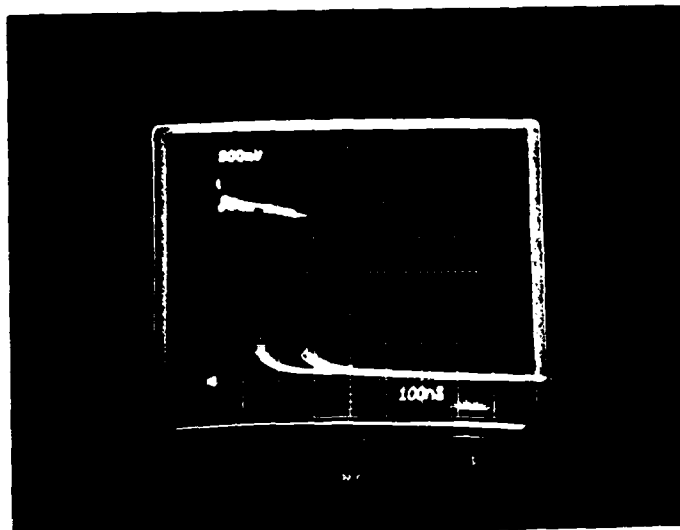


183

Date	5-24-85
Test Point	58R-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	100 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	

Comments:

184

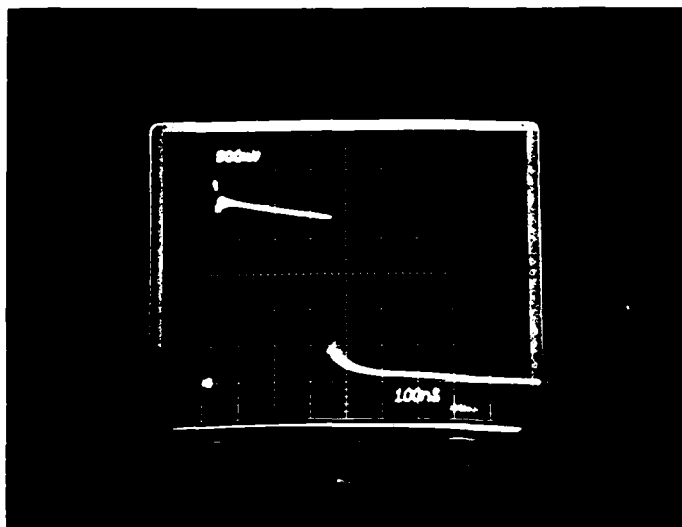


184

Date	5-24-85
Test Point	58-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	100 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	

Comments:

185

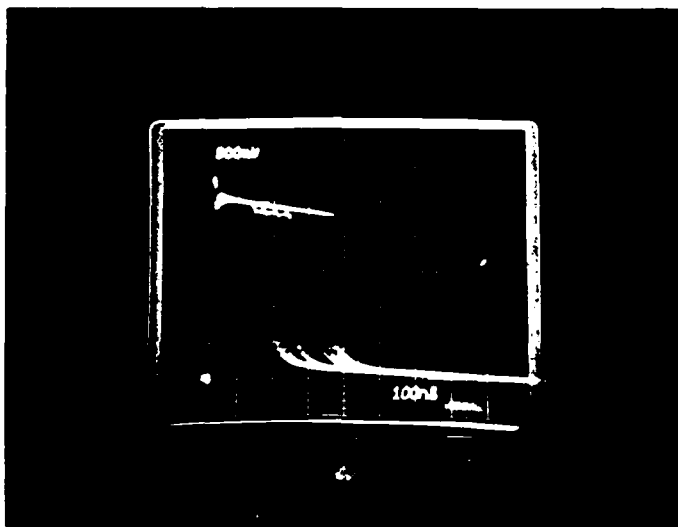


185

Date	5-24-85
Test Point	58R-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	100 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600
Data Link	

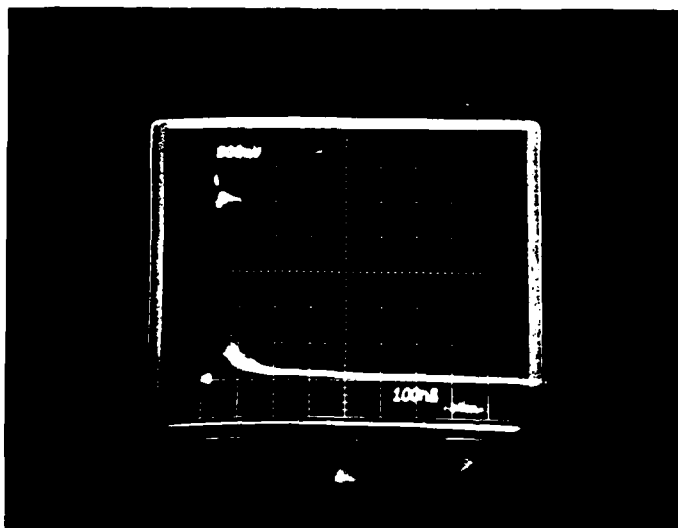
Comments:

186



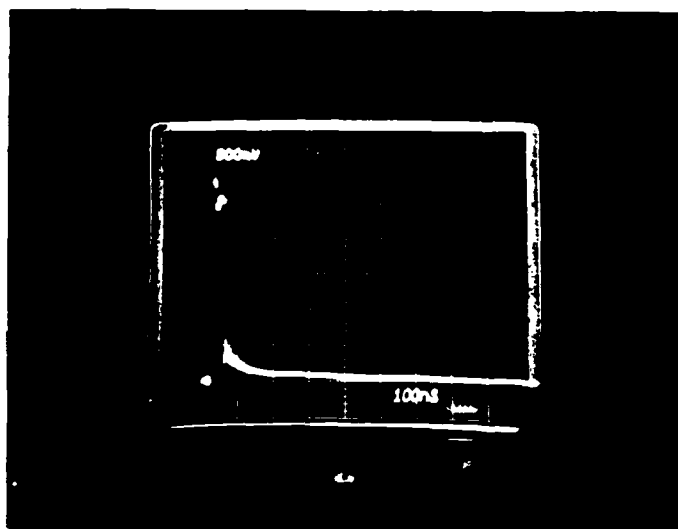
186

Date	5-24-85
Test Point	61-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	100 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	187



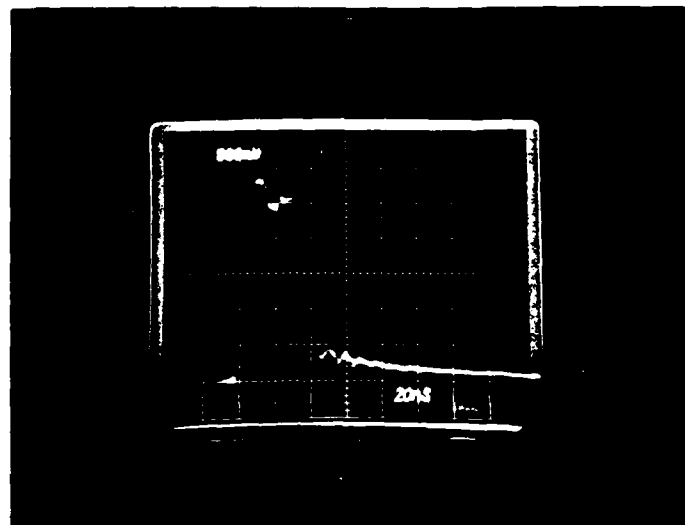
187

Date	5-24-85
Test Point	61R-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	100 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	188



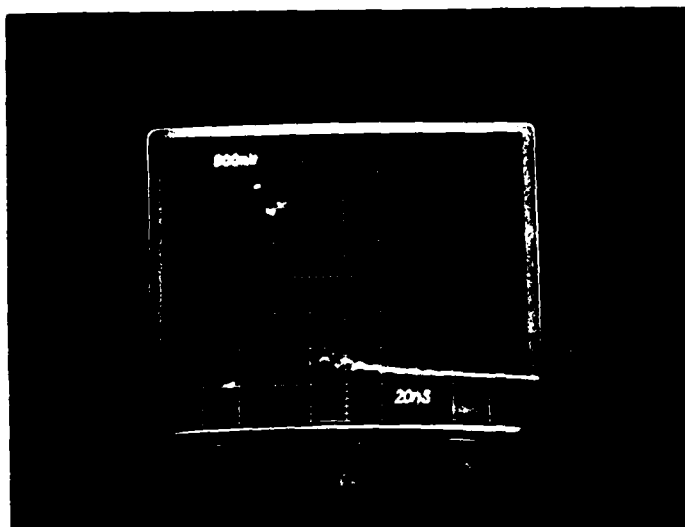
188

Date	5-24-85	
Test Point	61-BL-1/10-B	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	20	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Date Link		
Comments:	189	
20NS/		



189

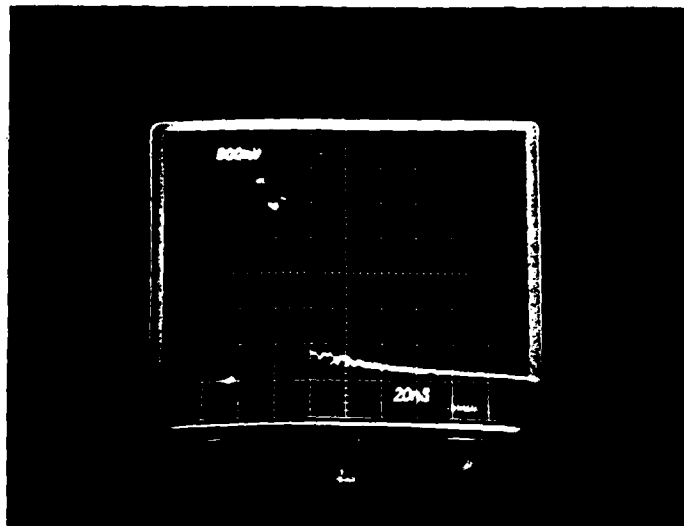
Date	5-24-85	
Test Point	61R-BL-1/10-B	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	20	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Date Link		
Comments:	190	



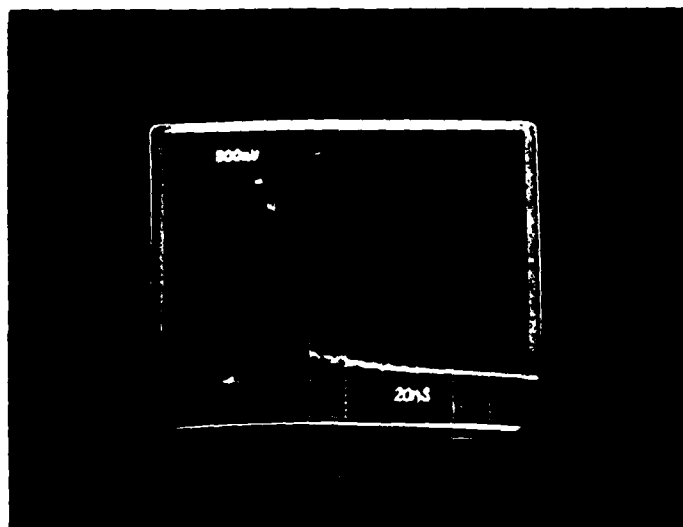
190



Date	5-24-85
Test Point	61-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	191

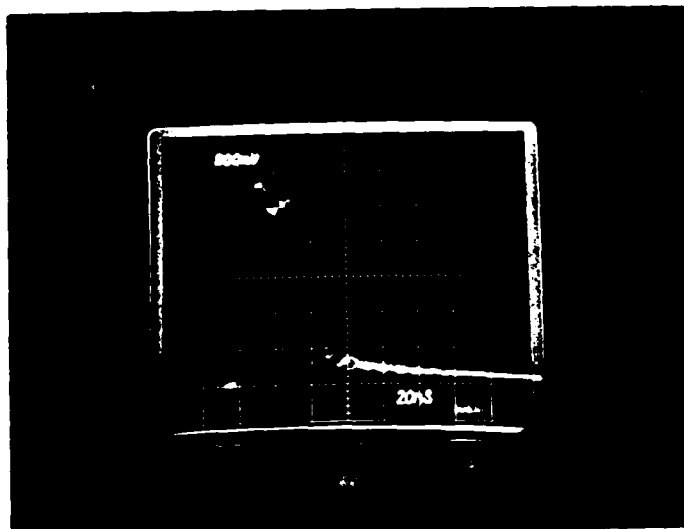


Date	5-24-85
Test Point	61R-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	192



Date	5-24-85	
Test Point	61-BL-1/10-D	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	20	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal	ns/div 2	
Vertical	ns/div 2	
Configuration		
Pulser Level	600V	
Data Link		
Comments:		

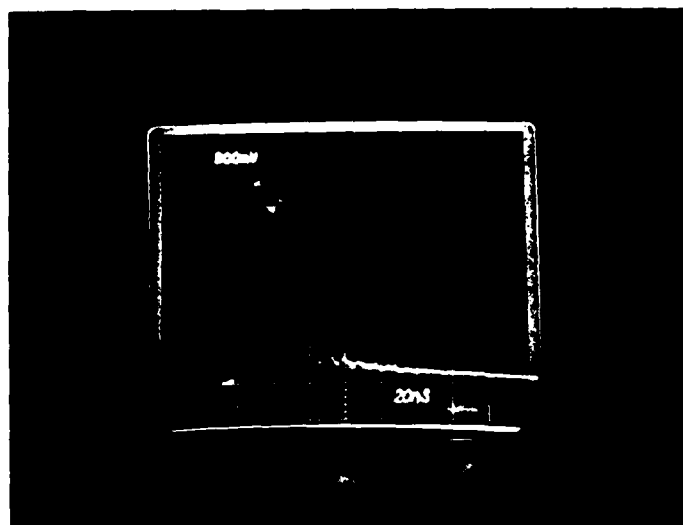
193



193

Date	5-24-85	
Test Point	61R-BL-1/10-D	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	20	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal	ns/div 2	
Vertical	ns/div 2	
Configuration		
Pulser Level	600V	
Data Link		
Comments:		

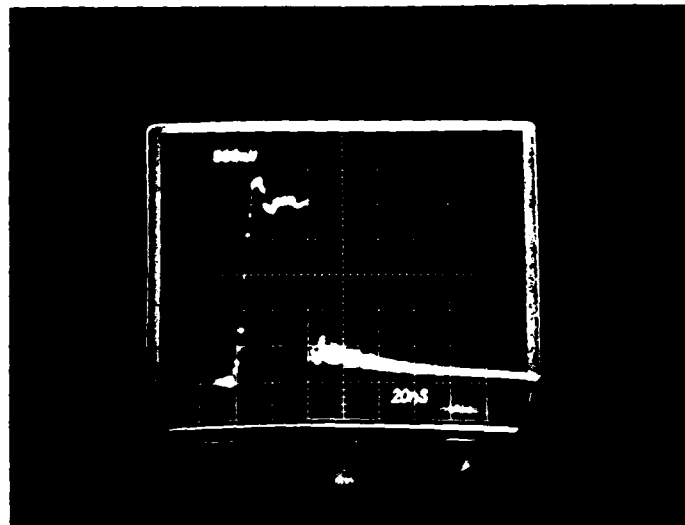
194



194

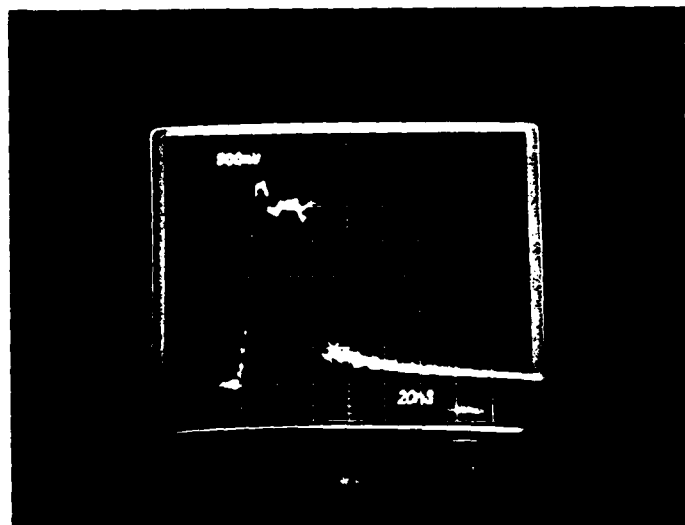
Date	5-24-85
Test Point	61-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	195

RUN WITH PULSER  
TO SHOW RISE + FALL

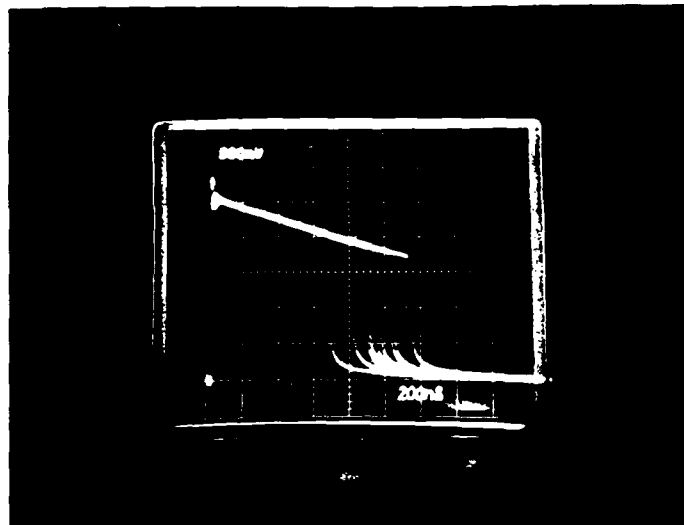


Date	5-24-85
Test Point	61R-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	196

RUN WITH PULSER TO  
SHOW RISE + FALL

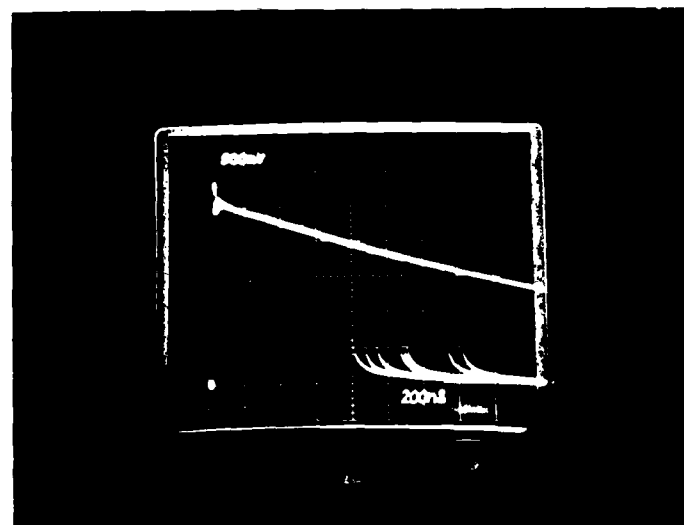


Date	5-24-85
Test Point	64-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	200 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	197



197

Date	5-24-85
Test Point	64R-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	200 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	198

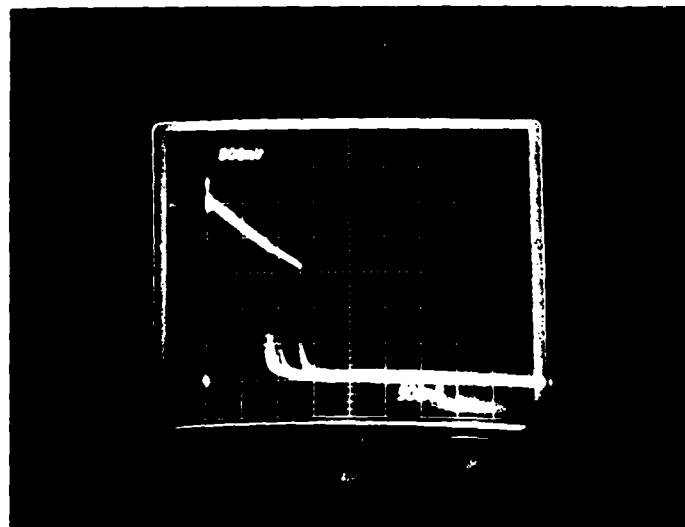


198

Date	5-24-85
Test Point	64-BC-1/10-A ←
Amplification	0 dB
Attenuation	0 dB
Horizontal	500 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	

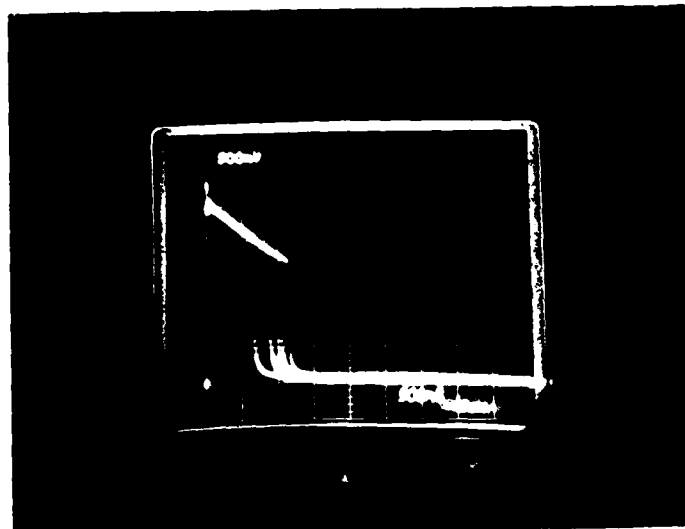
199

500ns/

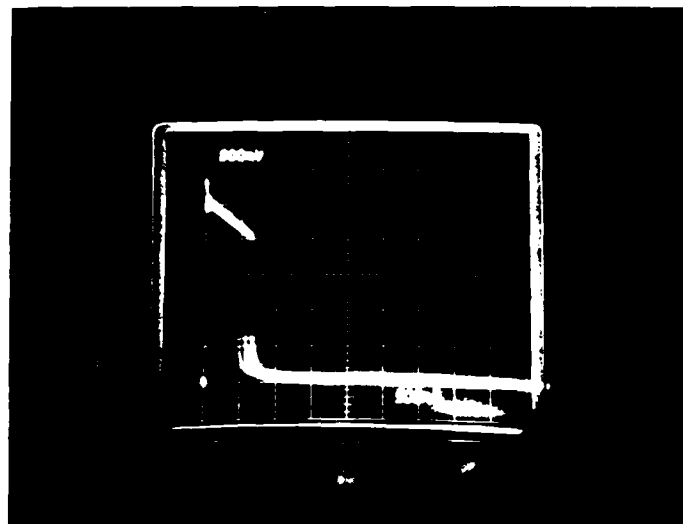


Date	
Test Point	64-PL-1/10-A ←
Amplification	dB
Attenuation	dB
Horizontal	ns/div 1
Vertical	mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	
Data Link	
Comments:	

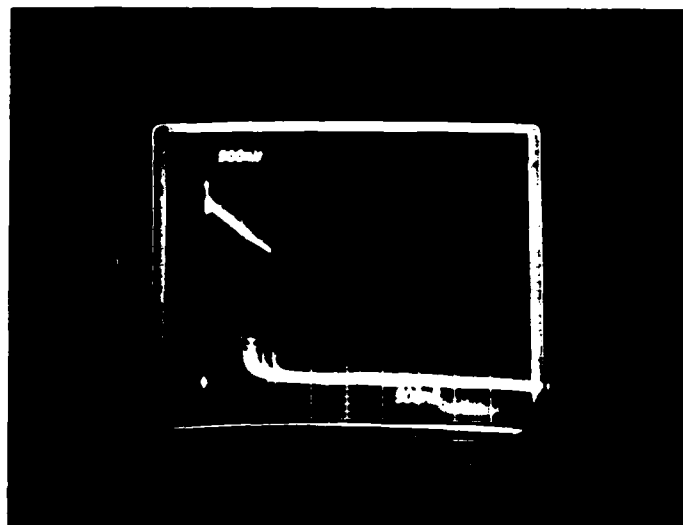
200



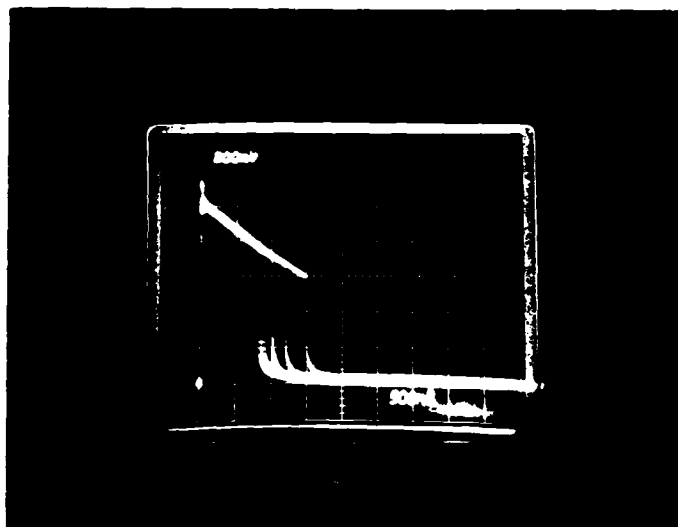
Date	5-24-85		
Test Point	64-BL-1/10-B		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	500	ns/div	1
Vertical	.5V (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:	201		



Date	5-24-85		
Test Point	64R-BL-1/10-B		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	500	ns/div	1
Vertical	.5V (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:	202		

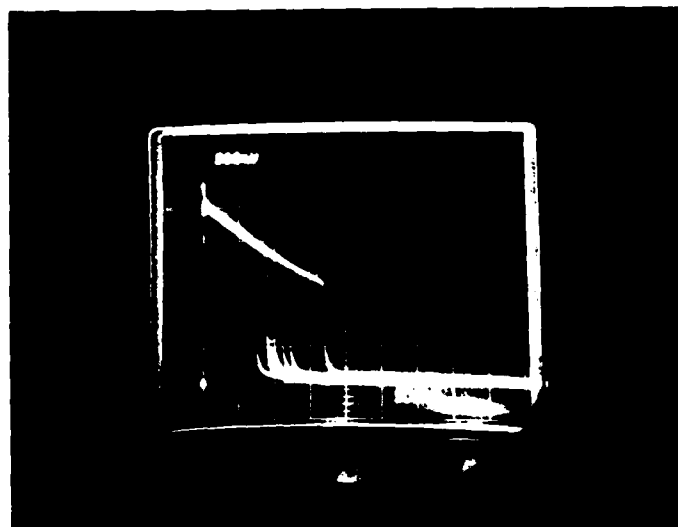


Date	5-24-85
Test Point	64-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	500 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	203



203

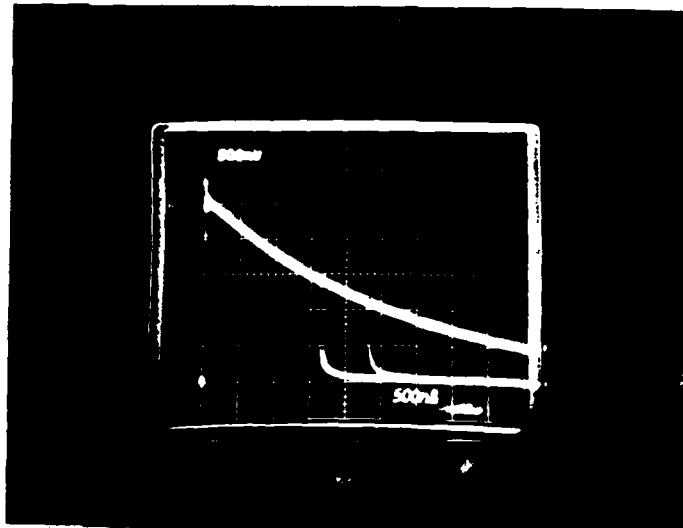
Date	5-24-85
Test Point	64R-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	500 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	204



204

Date 5-24-85  
 Test Point 64-BL-1/10-D  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 500 ns/div 1  
 Vertical .5V (120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

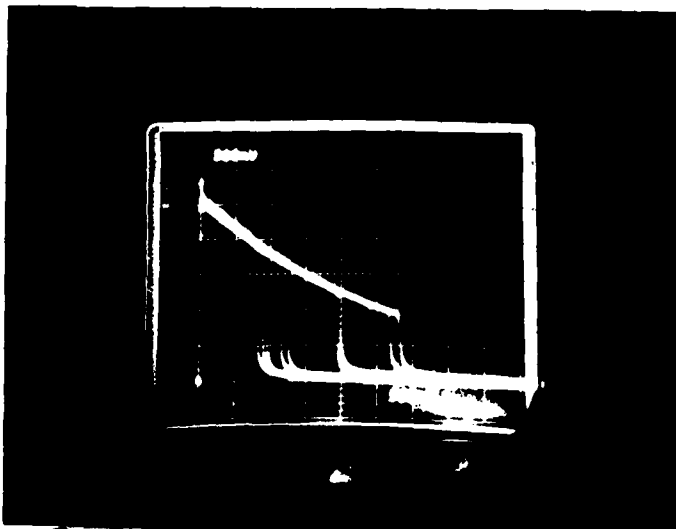
205



205

Date 5-24-85  
 Test Point 64R-BL-1/10-D  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 500 ns/div 1  
 Vertical .5V (120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

206

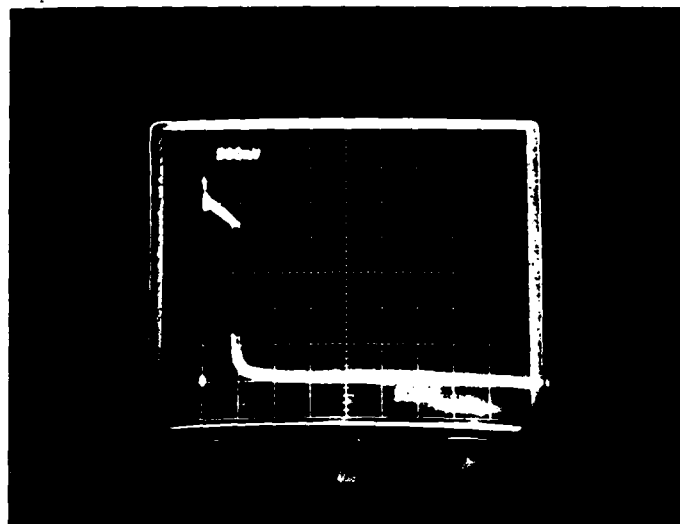


206



Date	5-24-85
Test Point	64-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	500 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

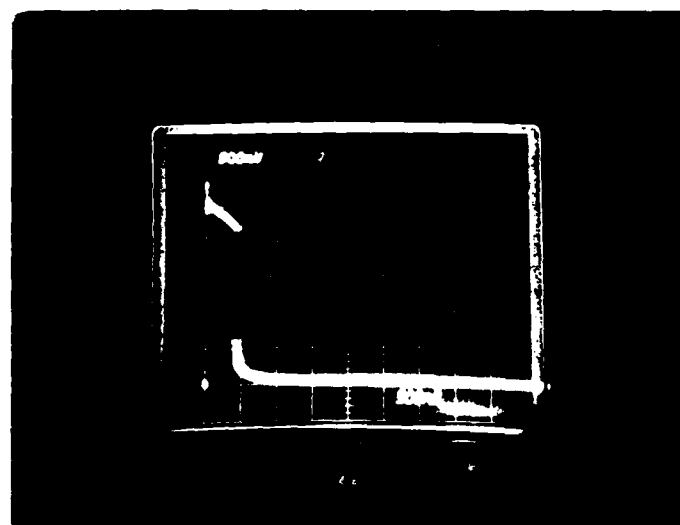
207



207

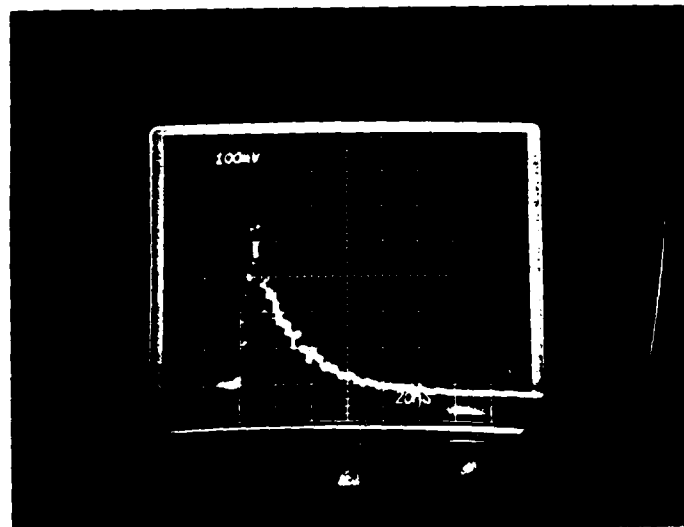
Date	5-24-85
Test Point	64R-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	500 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

208



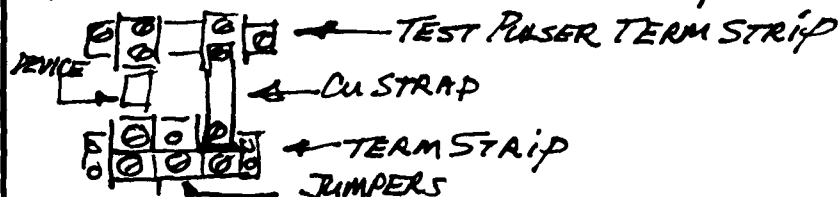
208

Date	5-28-85
Test Point	70-BL
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.1 (24V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	307



307

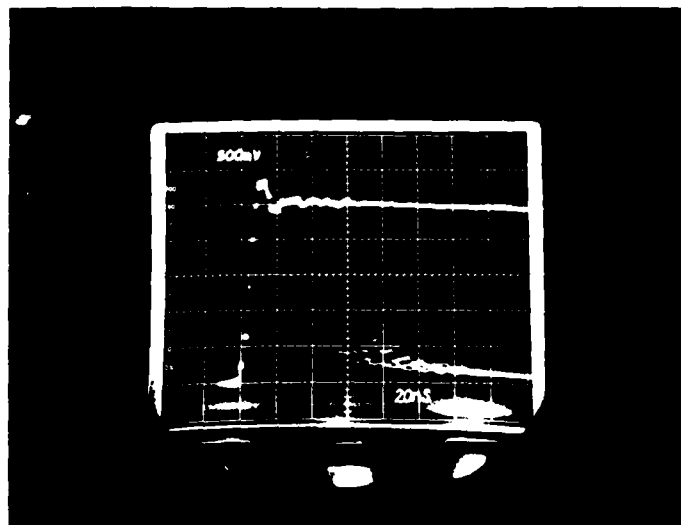
RISE TIME CK WITH TEST ADAPTER FOR SB-C150



Date	
Test Point	
Amplification	dB
Attenuation	dB
Horizontal	ns/div 1
Vertical	mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	
Data Link	
Comments:	

Date 5-28-85  
 Test Point 70-BL-410-A  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

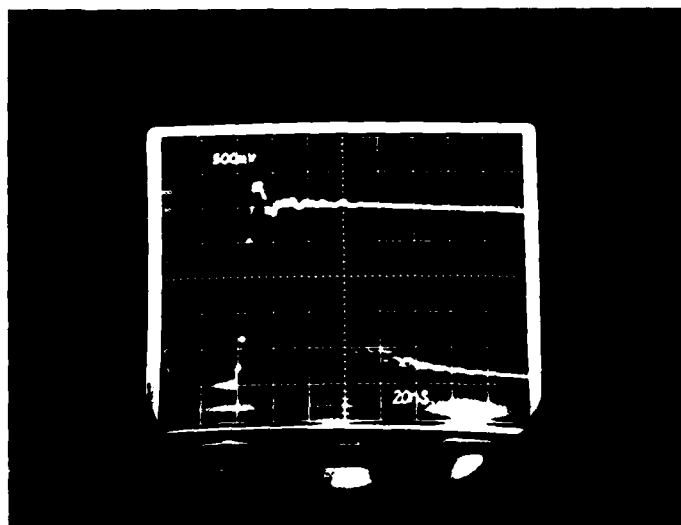
308



308

Date 5-28-85  
 Test Point 70R-BL-410-A  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

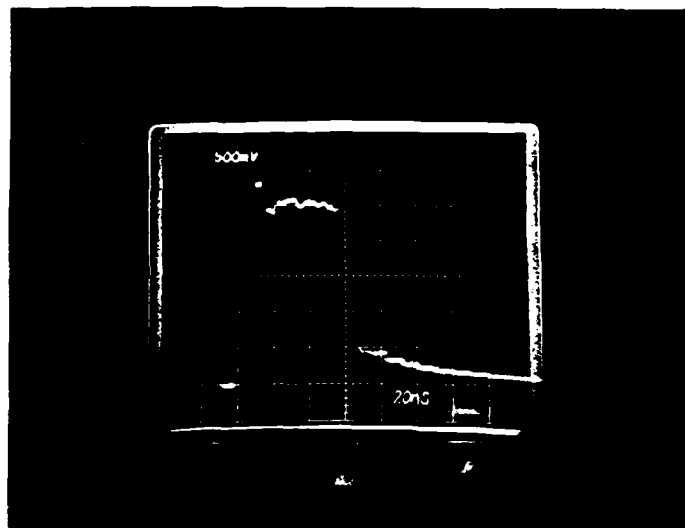
309



309

Date	5-28-85
Test Point	70-BL-1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(20V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

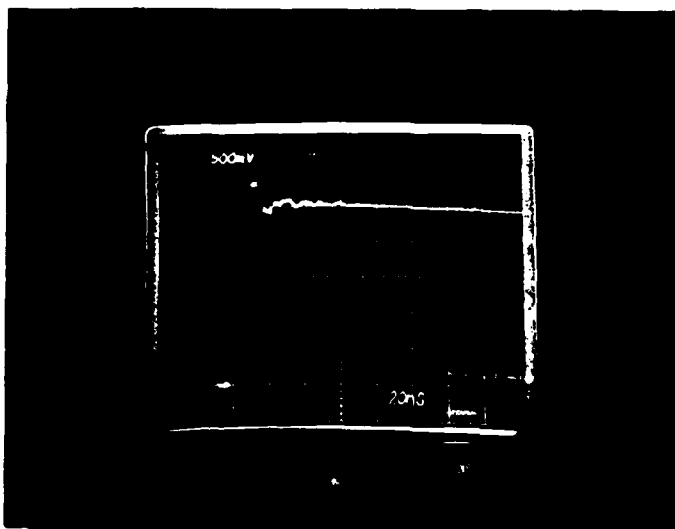
310



310

Date	5-28-85
Test Point	70R-BL-1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(20V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

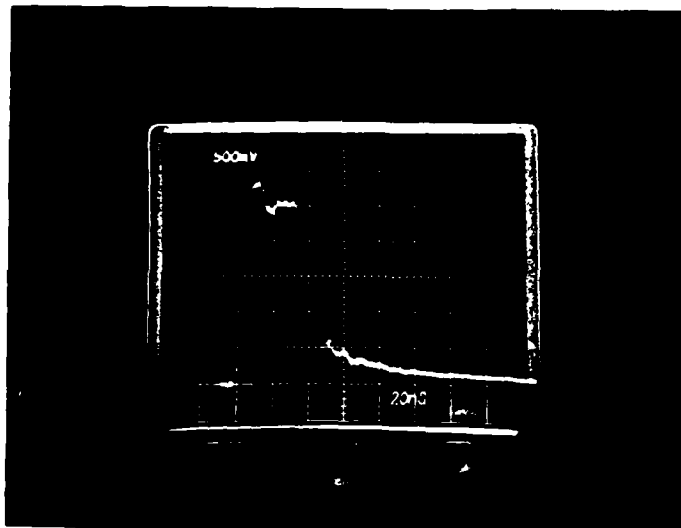
311



311

Date 5-28-85  
 Test Point 70-BL-1/10-C  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

312

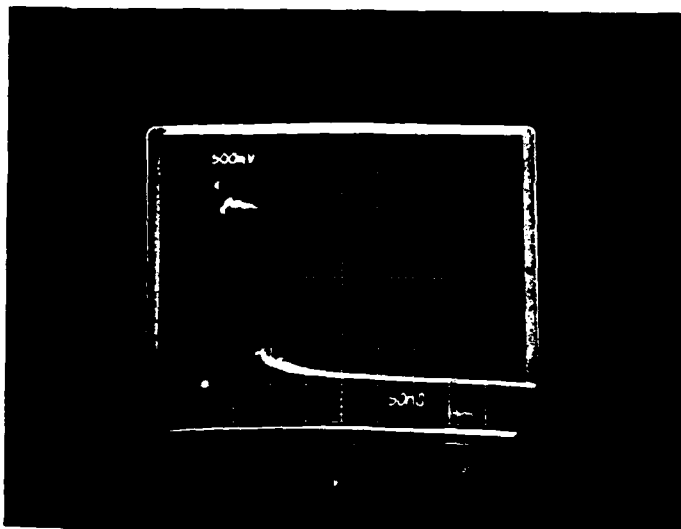


312

Date 5-28-85  
 Test Point 70R-BL-1/10-C  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

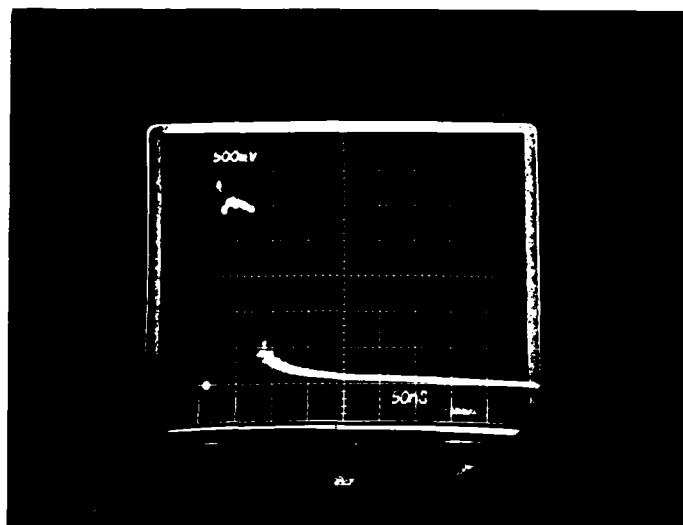
313

50ND/DIV



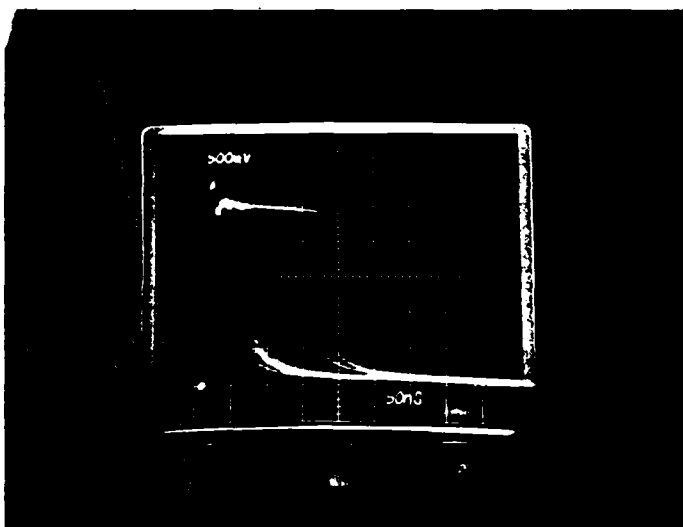
313

Date	5-28-85
Test Point	70-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	50 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	314



314

Date	5-28-85
Test Point	70R-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	50 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	315

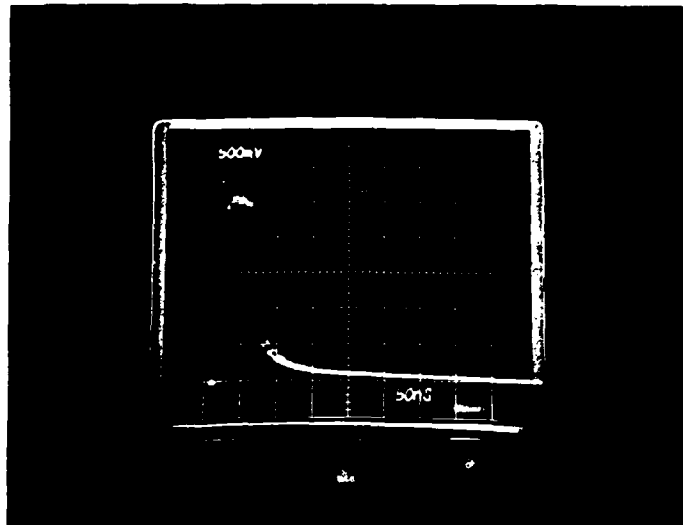


315

Date	5-28-85	
Test Point	70-BL-1/10-E	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	.5V (120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		

Comments: 316

4 PULSES IN 4 SEC.

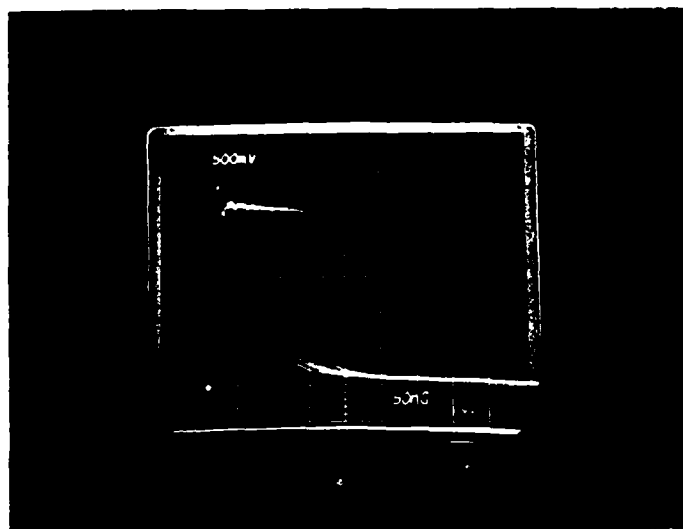


316

Date	5-28-85	
Test Point	70R-BL-1/10-E	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	50	ns/div 1
Vertical	.5V (120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		

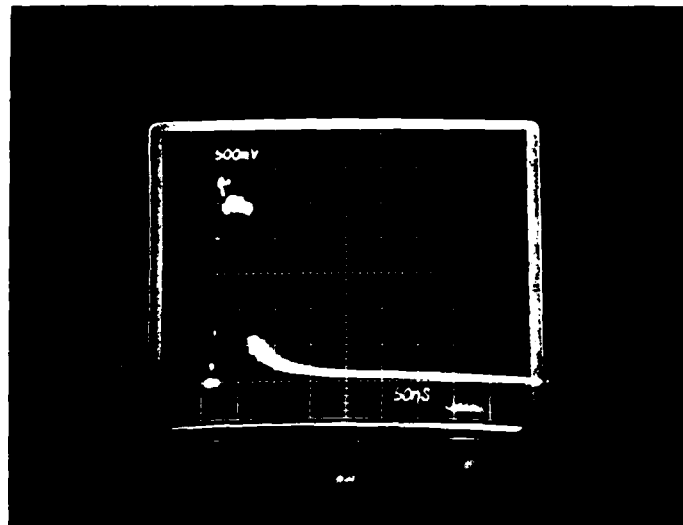
Comments: 317

4 PULSES IN 4 SEC.

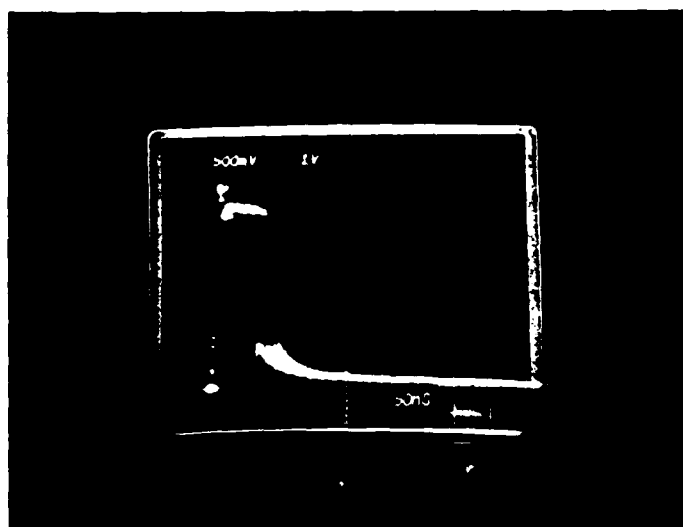


317

Date	5-28-85
Test Point	70-BL-1/10-F
Amplification	0 dB
Attenuation	0 dB
Horizontal	50 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	318

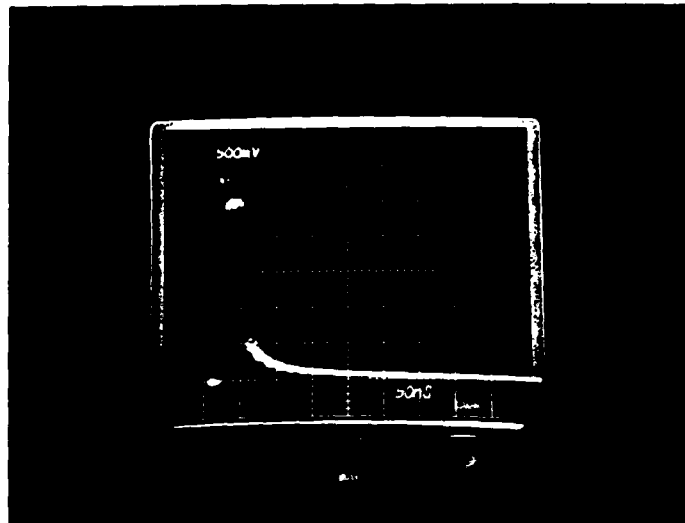


Date	5-28-85
Test Point	70R-BL-1/10-F
Amplification	0 dB
Attenuation	0 dB
Horizontal	50 ns/div 1
Vertical	.5(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	319

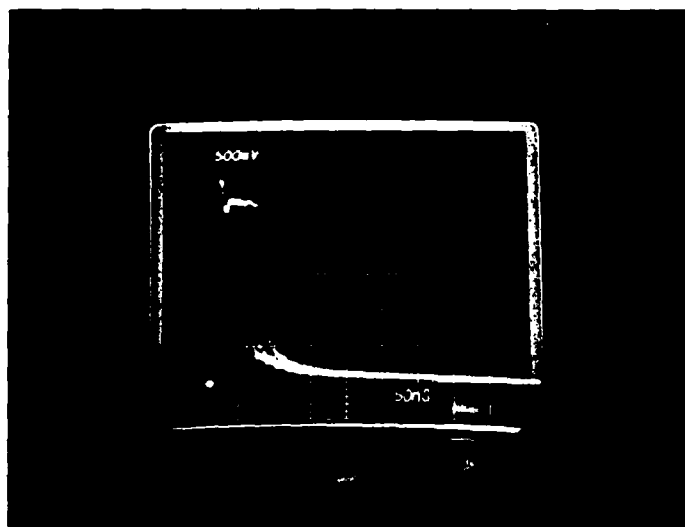




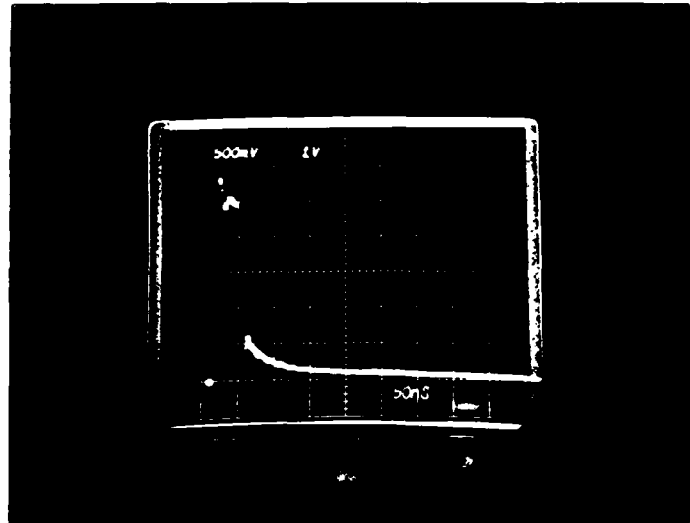
Date	5-28-85
Test Point	70-BL-1/0-G
Amplification	0 dB
Attenuation	0 dB
Horizontal	50 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	320



Date	5-28-85
Test Point	70R-BL-1/0-G
Amplification	0 dB
Attenuation	0 dB
Horizontal	50 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	321

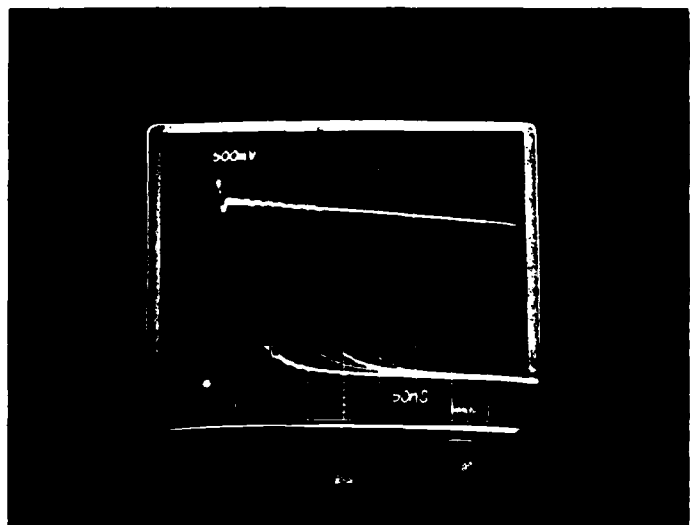


Date	5-28-85		
Test Point	70-BL-1/10-H		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5V(120V)	ns/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:	322		



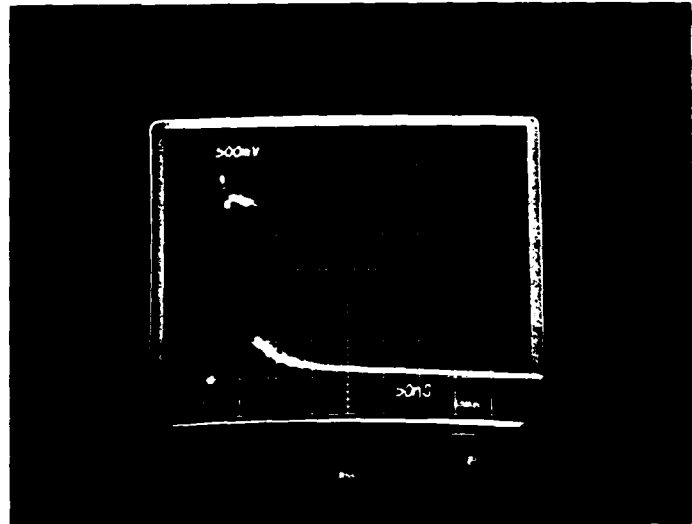
322

Date	5-28-85		
Test Point	70R-BL-1/10-H		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5V(120V)	ns/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:	323		



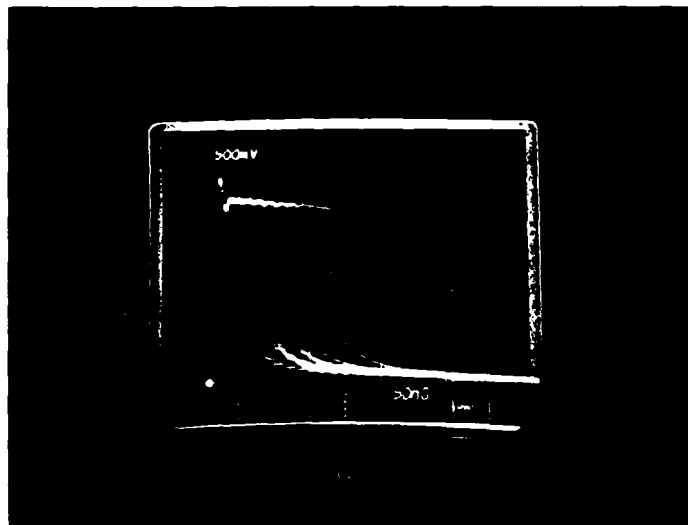
323

Date	5-28-85		
Test Point	70-BL-1/10-I		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5V (120V)	ns/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:	324		



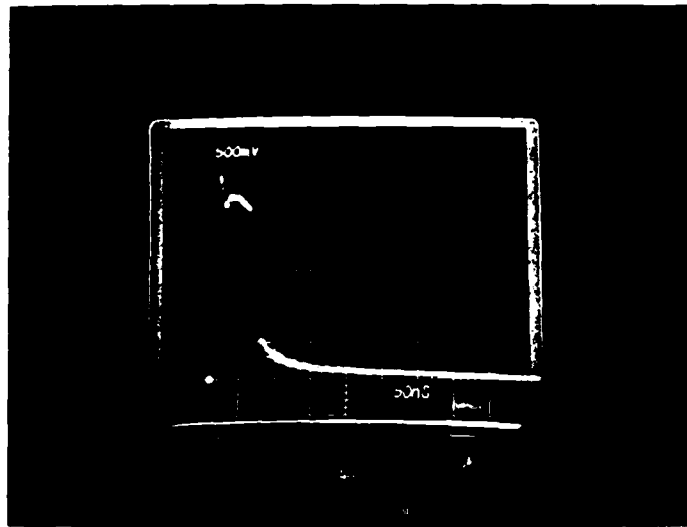
324

Date	5-28-85		
Test Point	70R-BL-1/10-I		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	.5V (120V)	ns/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:	325		



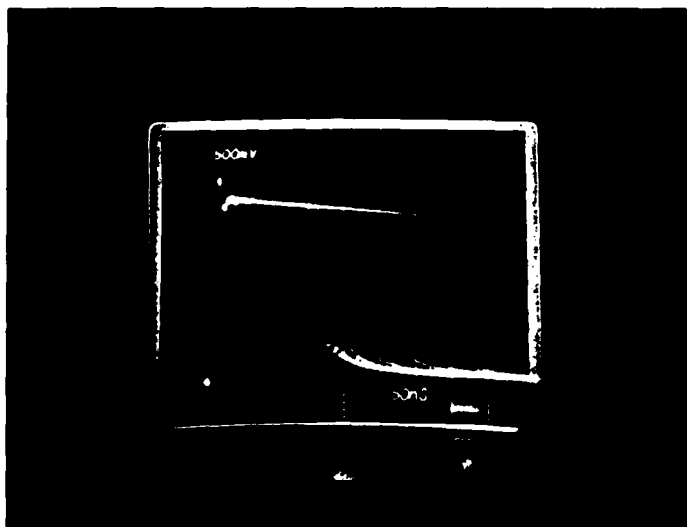
325

Date	5-28-85
Test Point	70-BL-1/10-J
Amplification	dB
Attenuation	dB
Horizontal	ns/div 1
Vertical	mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	326



326

Date	5-28-85
Test Point	70R-BL-1/10-J
Amplification	dB
Attenuation	dB
Horizontal	ns/div 1
Vertical	mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	
Data Link	
Comments:	327



327

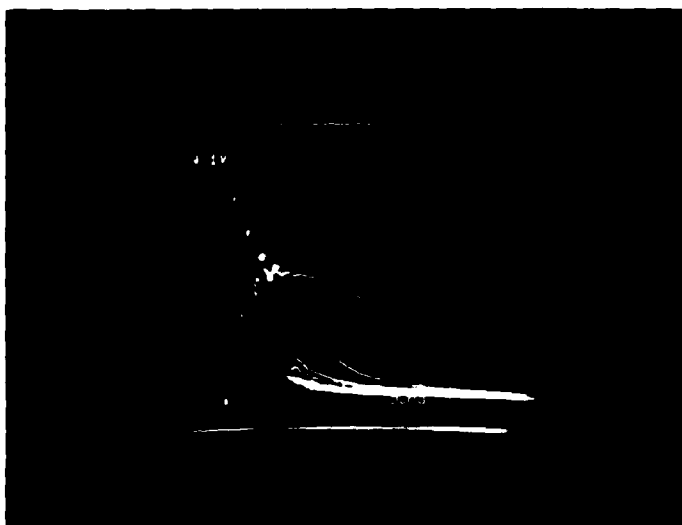
5.2 div = 600V (calibrated)  
1 div = 115.4

Date	5-29-85		
Test Point	74-BL-1/10-Ø		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	1.0V(240V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	+600V		
Data Link			
Comments:	342		



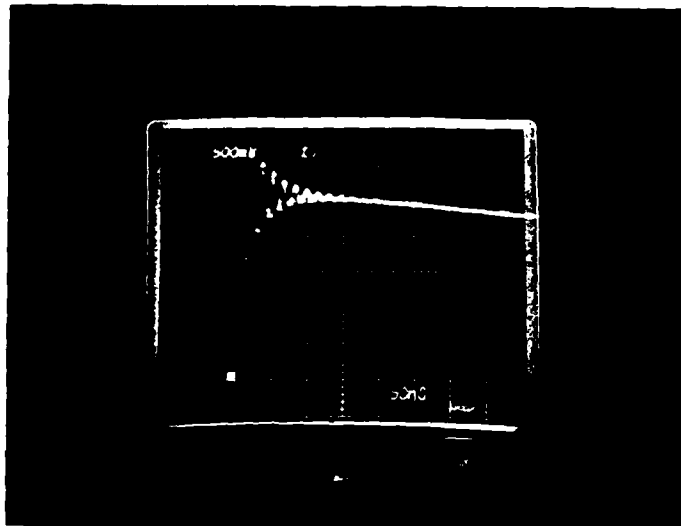
342

Date	5-29-85		
Test Point	74R-ØL-1/10-Ø		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	50	ns/div	1
Vertical	1.0V(240V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	-600V		
Data Link			
Comments:	343		



343

Date	5-29-85
Test Point	
Amplification	— dB
Attenuation	— dB
Horizontal	50 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	+600 V
Data Link	
Comments:	



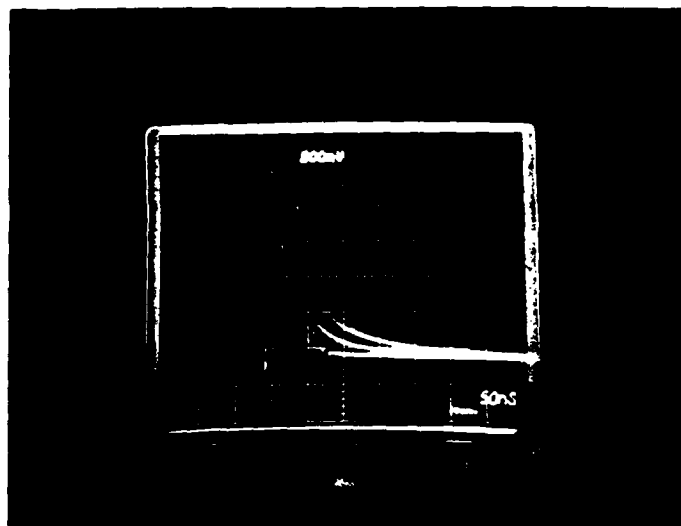
346

346

O-SCOPE CALIBRATION CHECK

Date	
Test Point	
Amplification	dB
Attenuation	dB
Horizontal	ns/div 1
Vertical	mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	
Data Link	
Comments:	

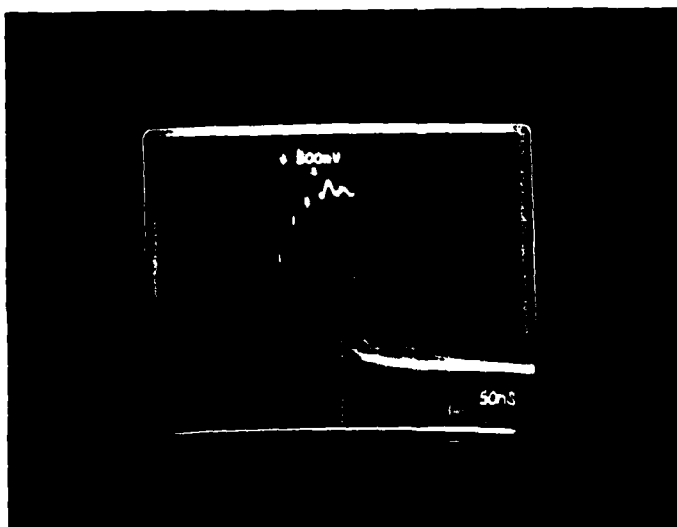
Date 5-29-85  
 Test Point 74-BL-1/0-Ø  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level +600V  
 Data Link  
 Comments: #349



349

Date 5-29-85  
 Test Point 74R-BL-1/0-Ø  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level -(20V)  
 Data Link  
 Comments: #350

INVERT SCOPE



350

## Cal notes

Before Attenuator  
input signal  
used 2.75 divs

after Attenuator  
same input  
used 3.50 divs

---

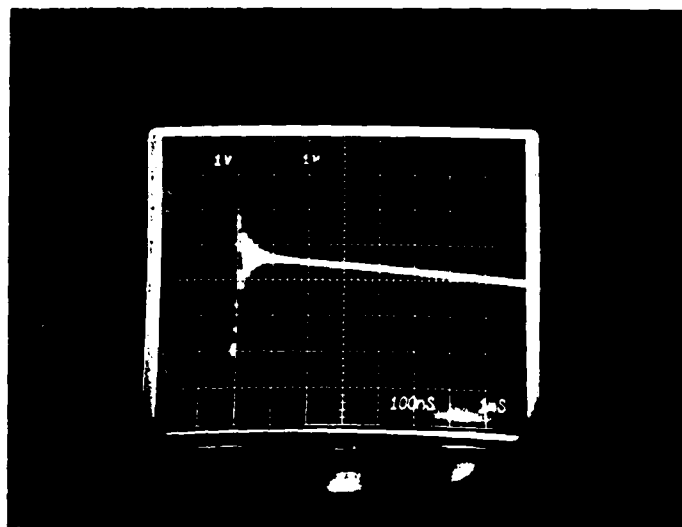
error is 2.09 db  
or 127.2 to 100  
or 100 to 78.6



Date 5-29-85  
 Test Point CALIB  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 100 ns/div 1  
 Vertical 1V ~~100V~~/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

354

NO ATTENUATION



354

Date  
 Test Point CALIB  
 Amplification 0 dB  
 Attenuation 20 dB  
 Horizontal 100 ns/div 1  
 Vertical .1V mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600X  
 Data Link  
 Comments:

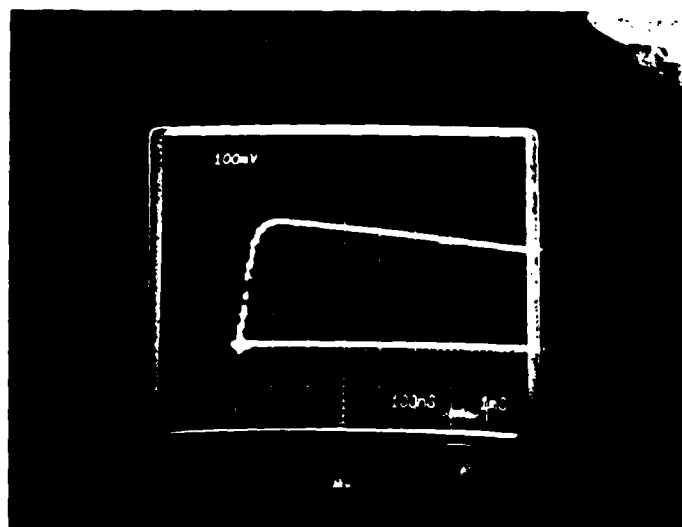
355

NOTE 8 1V = 1900V WHEN

USING 20 dB ATTEN.

MOV IN SIGNAL LINE TO STOP DAMAGE TO SCOPE

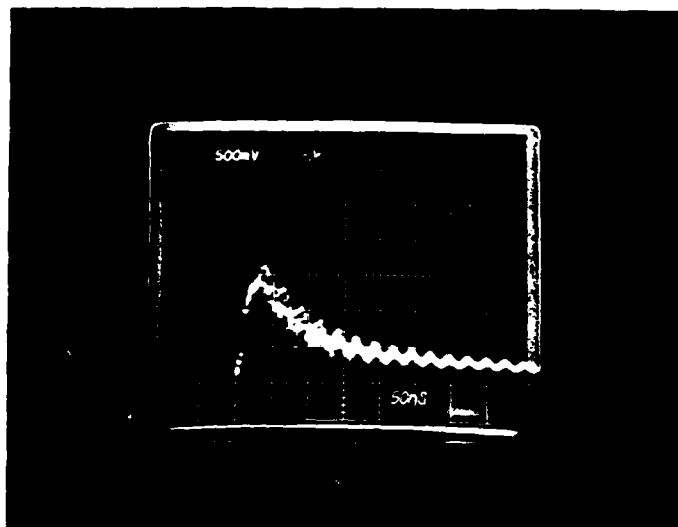
WITH 20dB ATTN - MULTIPLY BY 78.6% FOR VOLTAGE LEVEL.



355

Date 5-29-85  
 Test Point 75-BL-#10-Ø  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(240V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level +600V  
 Data Link  
 Comments:

# 356

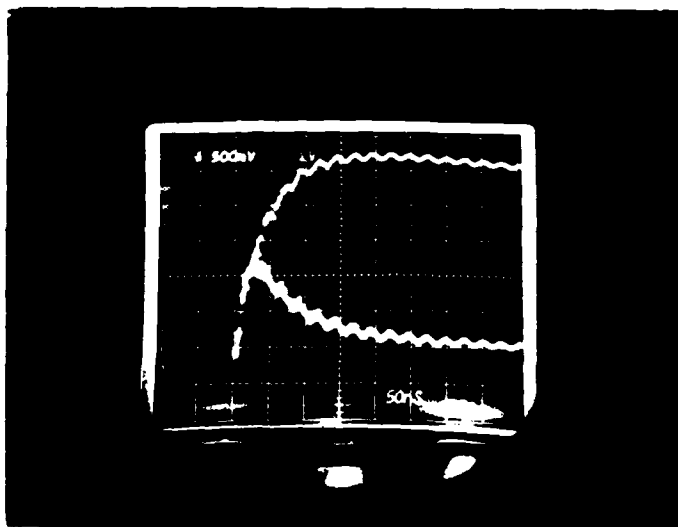


356

Date 5.29-85  
 Test Point 75-BL-#10-Ø  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(240V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level -600V  
 Data Link  
 Comments:

#357

WITH REF TRACE



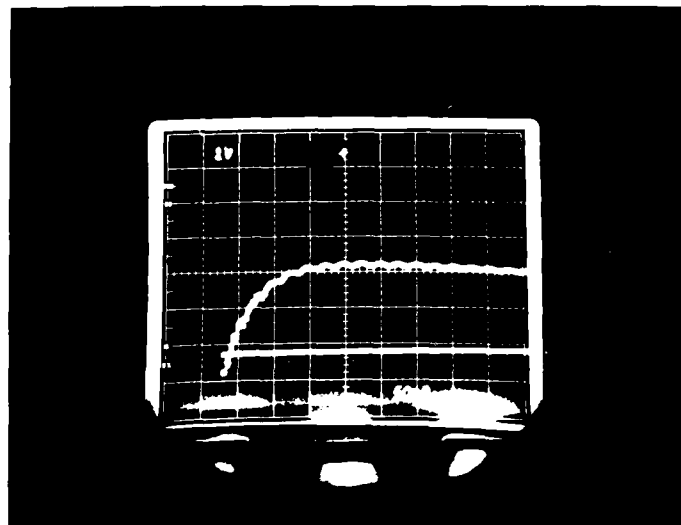
357

Date	5-31-85
Test Point	76-AL-410-Ø
Amplification	dB
Attenuation	dB
Horizontal	50 ns/div 1
Vertical	1V (190V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	
Data Link	+600V

Comments:

508

HOT



508

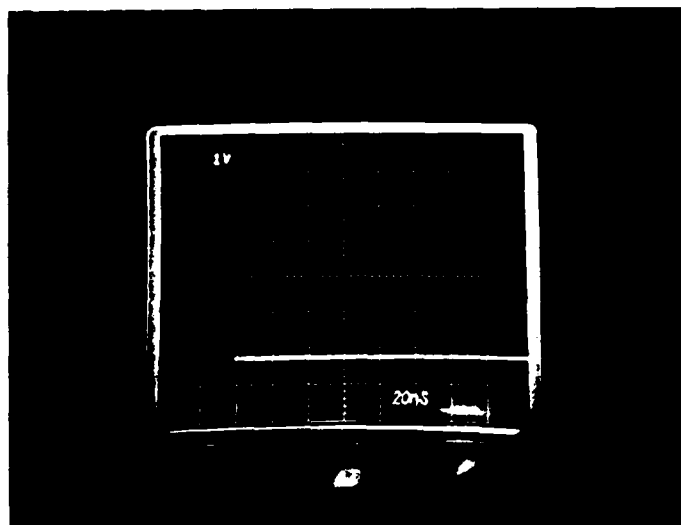
Date	5-31-85
Test Point	76-AL-1/10 Ø
Amplification	dB
Attenuation	dB
Horizontal	20 ns/div 1
Vertical	1V (190V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	
Data Link	+600V

Comments:

509

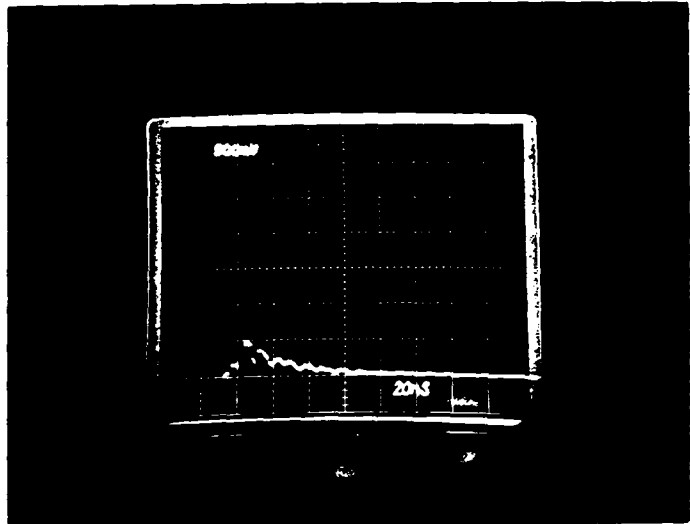
NO REF TRACE

HOT



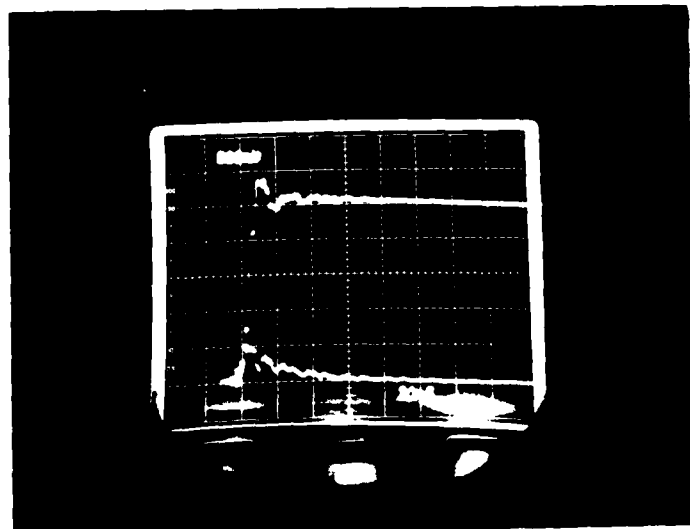
509

Date 5-24-85  
 Test Point 77-BL-1/10-A  
 Amplification dB  
 Attenuation dB  
 Horizontal 20 ns/div 1  
 Vertical .5V (120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 209  
USE REF BELOW



209

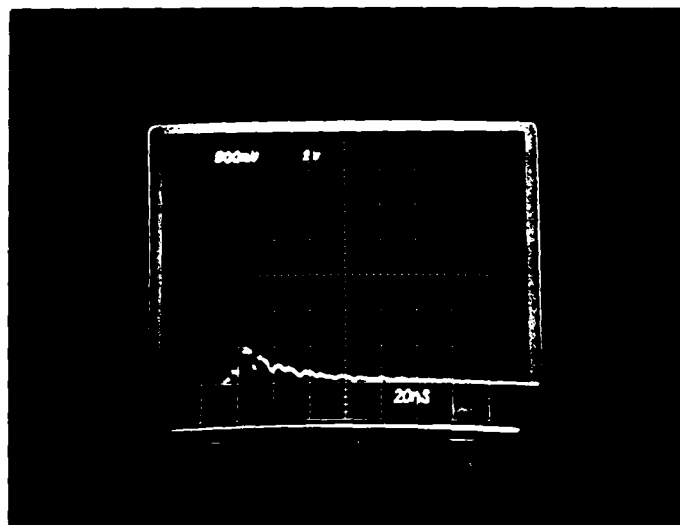
Date 5-24-85  
 Test Point 77R-BL-1/10-A  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V (120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 210



210

Date 5-24-85  
 Test Point 77-BL-1/10-B  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) ~~mv~~/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

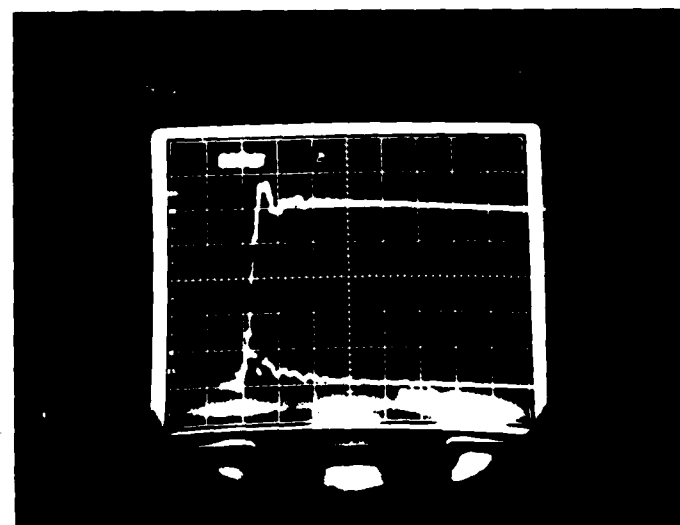
211



211

Date 5-24-85  
 Test Point 77R-BL-1/10-B  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) ~~mv~~/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

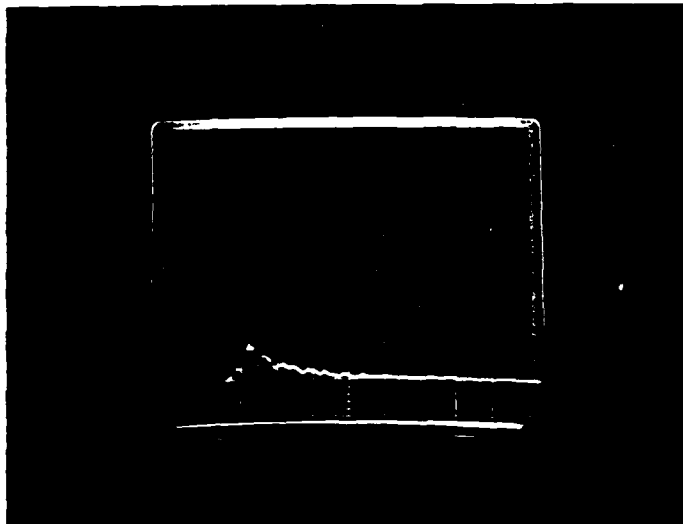
212



212

Date	5-28-85		
Test Point	77-BL-1/10-C		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	.5V (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			

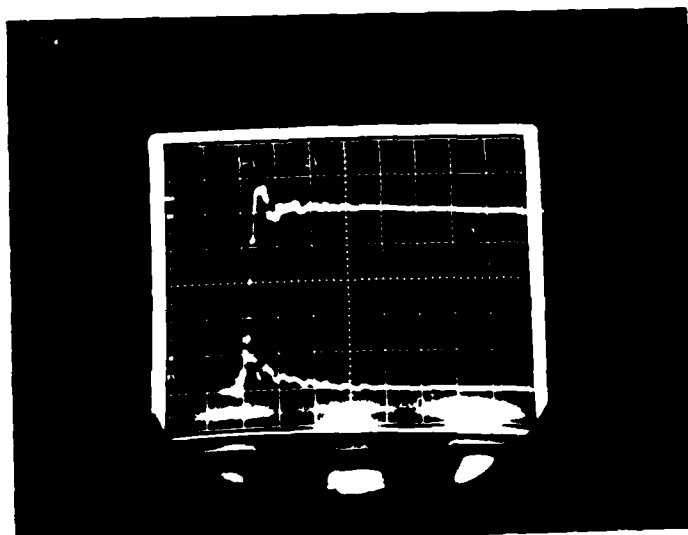
Comments: 213  
NO REF PULSE



213

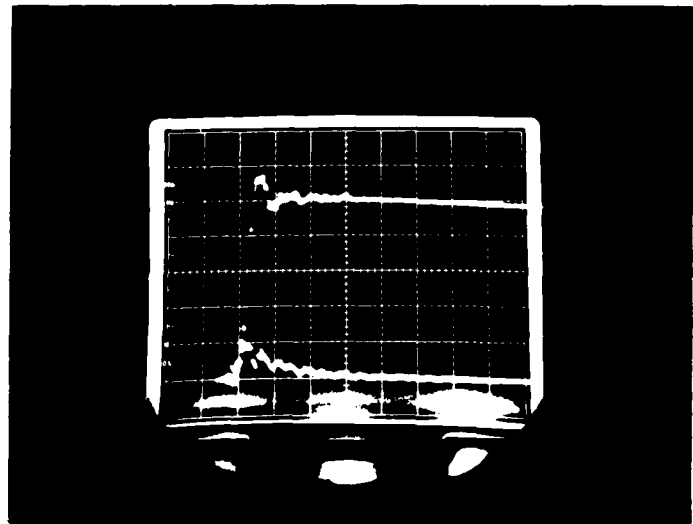
Date	5-28-85		
Test Point	77R-BL-1/10-C		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	.5V (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			

Comments: 214

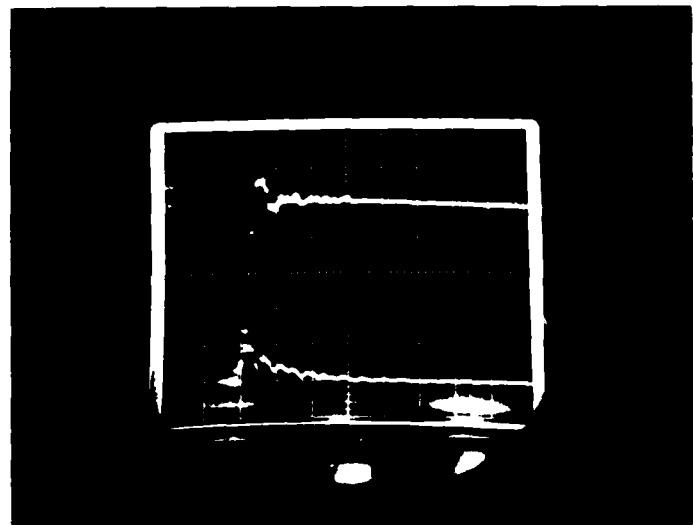


214

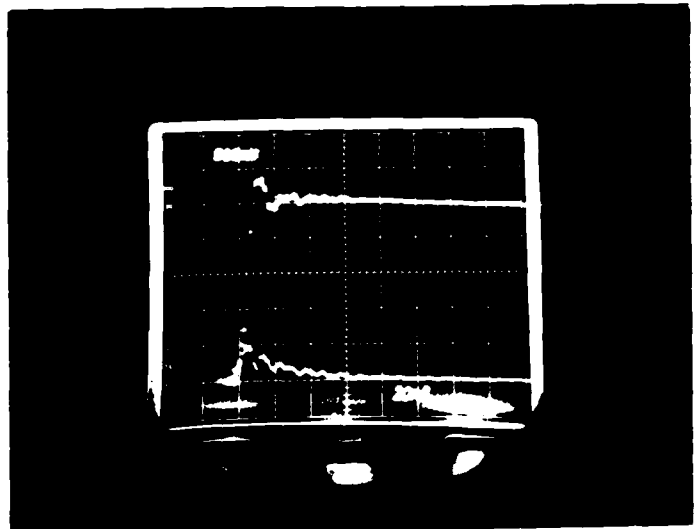
Date	5-28-85
Test Point	77-0L-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	215



Date	5-28-85
Test Point	77R-0L-4/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	216

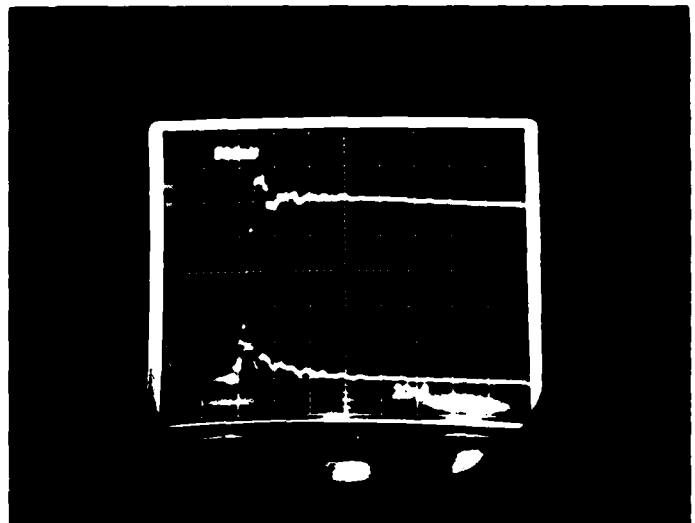


Date	5-28-85
Test Point	77-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	217



217

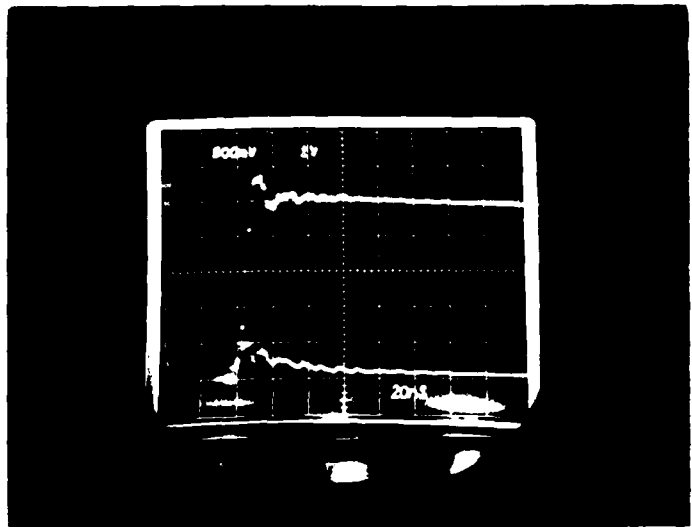
Date	5-28-85
Test Point	77R-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	218



218

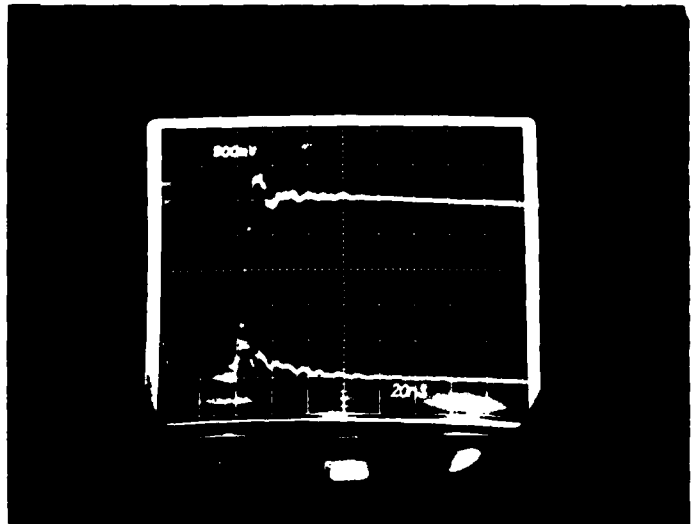


Date 5-28-85  
 Test Point 80-BL-1/10-A  
 Amplification 0dB  
 Attenuation 0dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 219



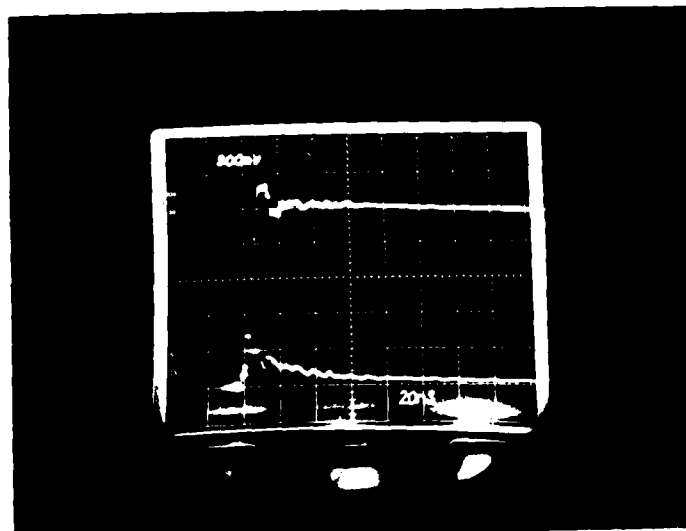
219

Date 5-28-85  
 Test Point 80R-BL-1/10 A  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 220



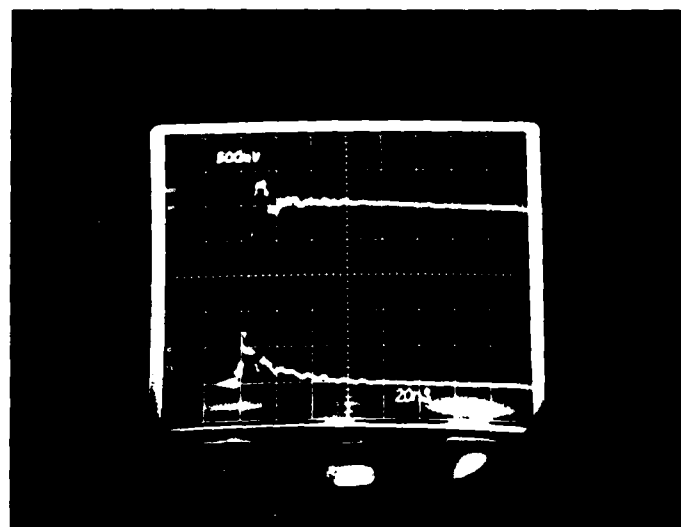
220

Date	5-28-85
Test Point	80-BL- 1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	221



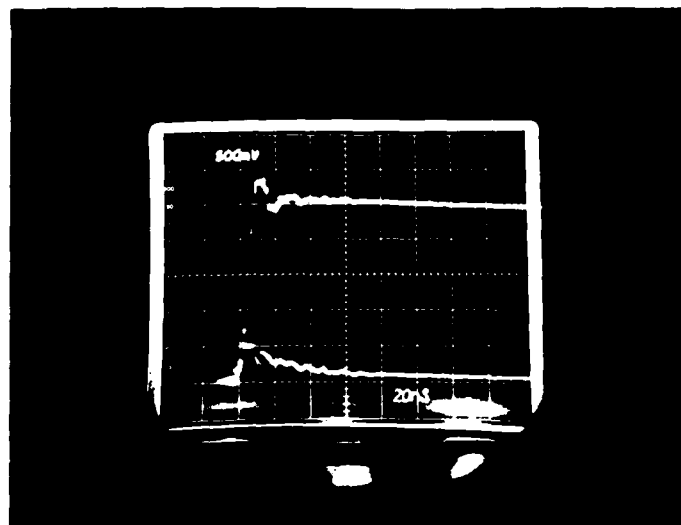
221

Date	5-28-85
Test Point	80-BL- 1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	222



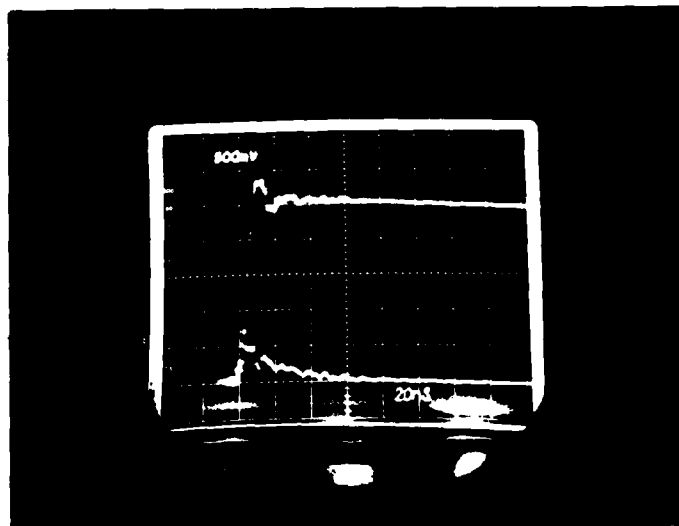
222

Date	5-28-85
Test Point	80-BL-410-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	223



223

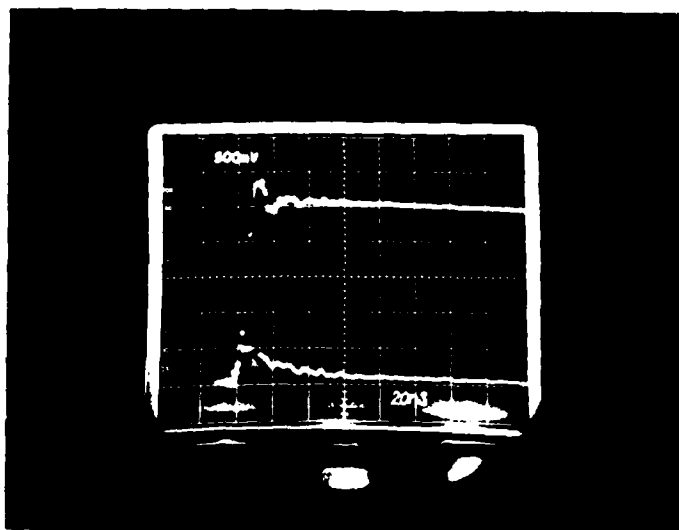
Date	5-28-85
Test Point	80R-BL-1/10C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600
Data Link	
Comments:	224



224

Date	5-28-85		
Test Point	80-BL-1/10-D		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	.5V (120V)	ms/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:			

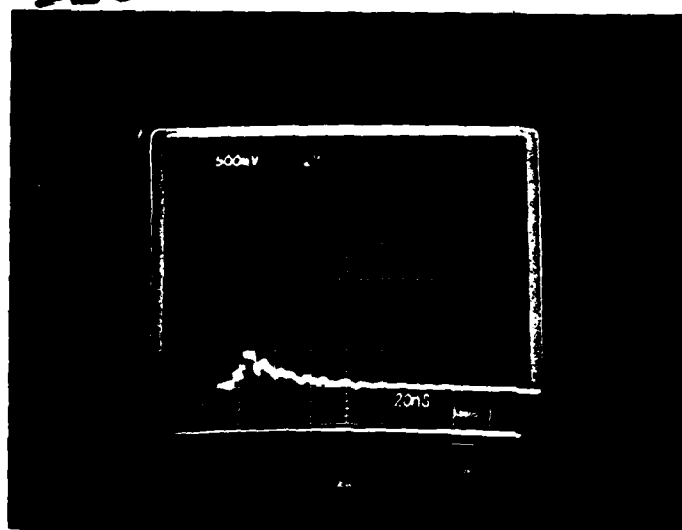
225



225

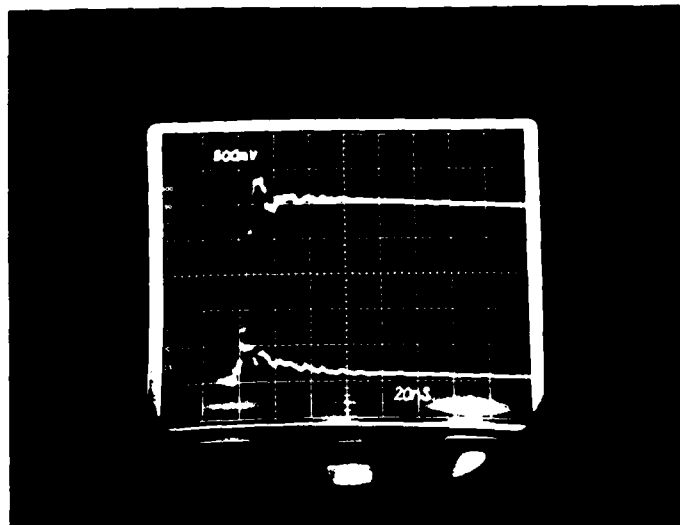
Date	5-28-85		
Test Point	80R-BL-1/10-D		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	.5V (120V)	ms/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:			

226



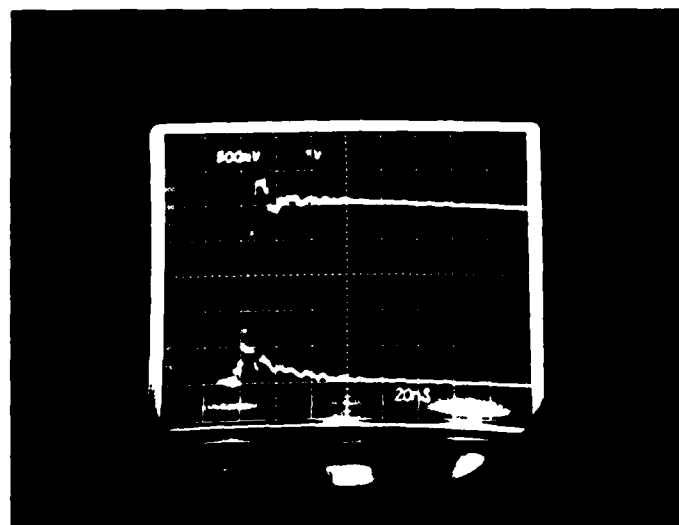
No Ref.

Date 5-28-85  
 Test Point 80-BL-1/10-E  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) 1 /div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 227



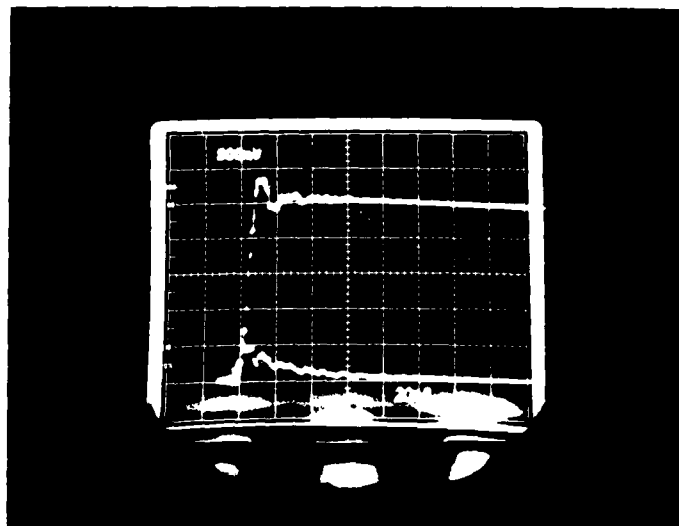
227

Date 5-28-85  
 Test Point 80R-BL-1/10-E  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) 1 /div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 228

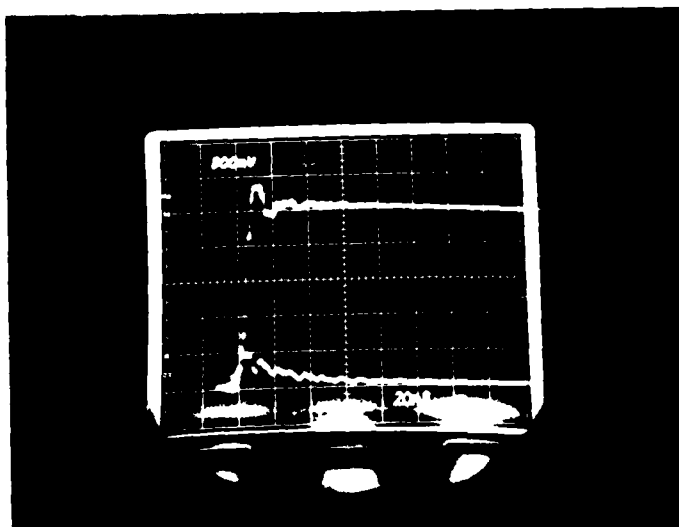


228

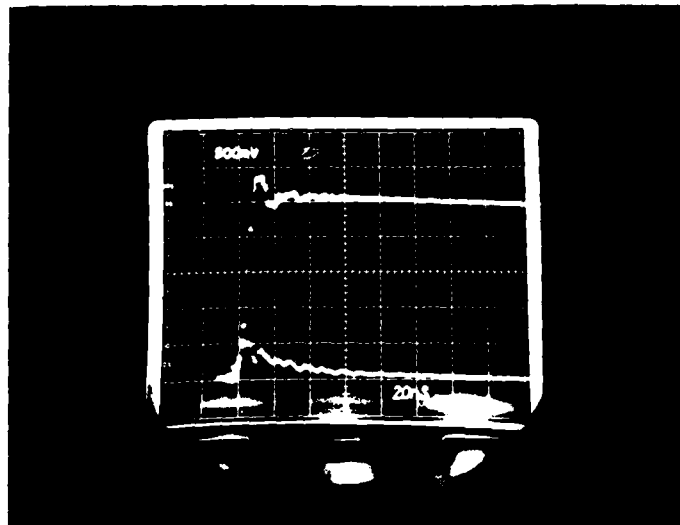
Date	5-28-85		
Test Point	83-BL-1/10-A		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	.5V(120V)	ms/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:	229		



Date	5-28-85		
Test Point	83R-BL-1/10-A		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	.5V(120V)	ms/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:	230		

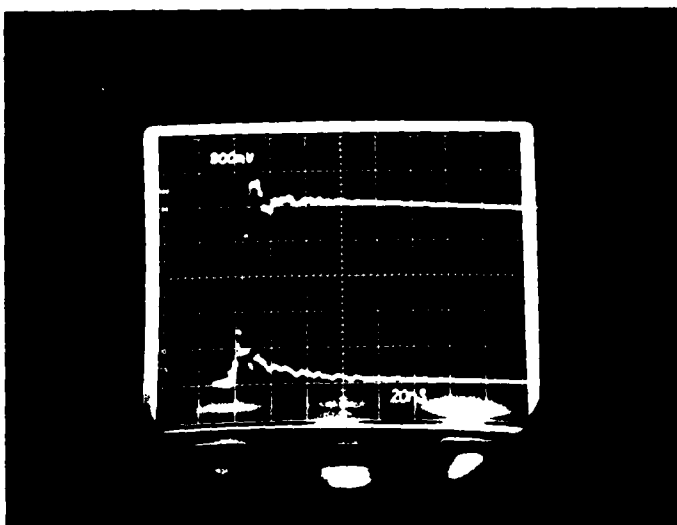


Date 5-28-85  
 Test Point 83-BL-1/10-B  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V (120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 231



231

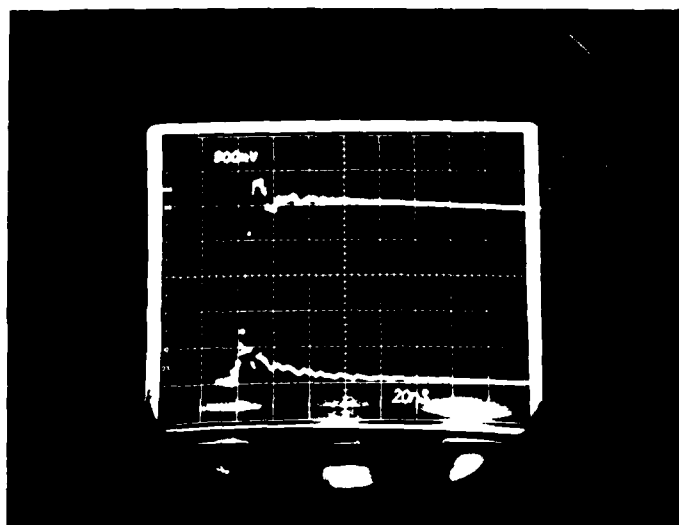
Date 5-28-85  
 Test Point 85R-BL-1/10-B  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V (120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 232



232

Date	5-28-85
Test Point	83-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	

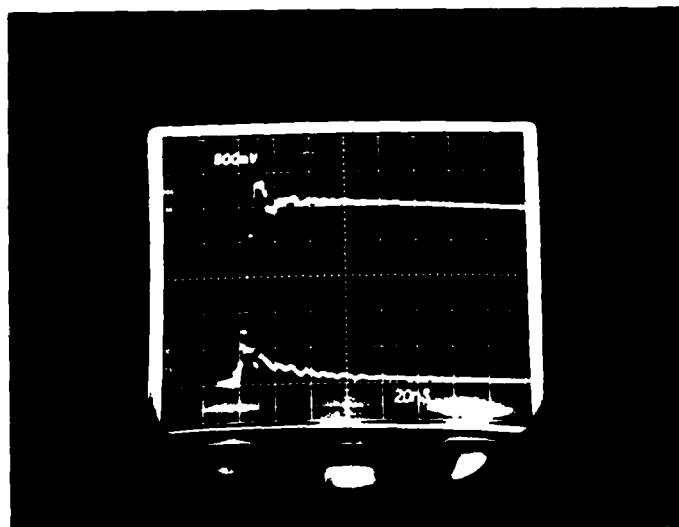
233



233

Date	5-28-85
Test Point	83R-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	

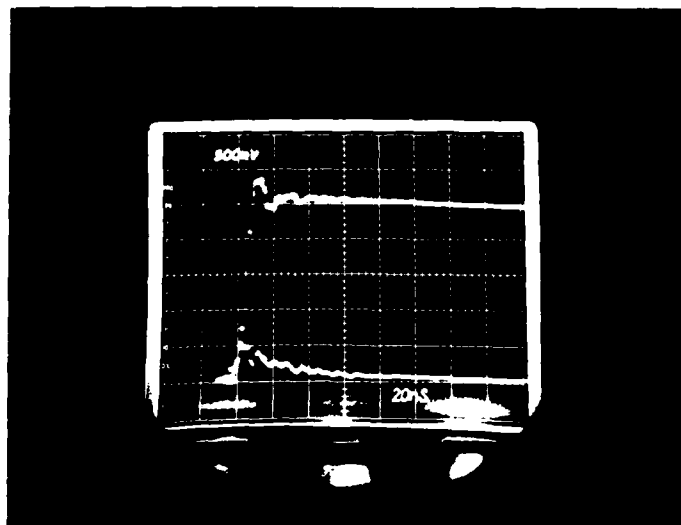
234



234

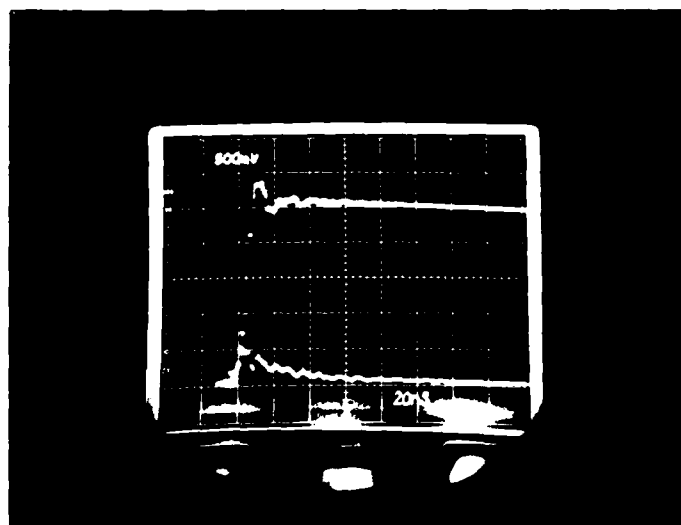


Date	5-28-85
Test Point	83-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) <del>100</del> /div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	235



235

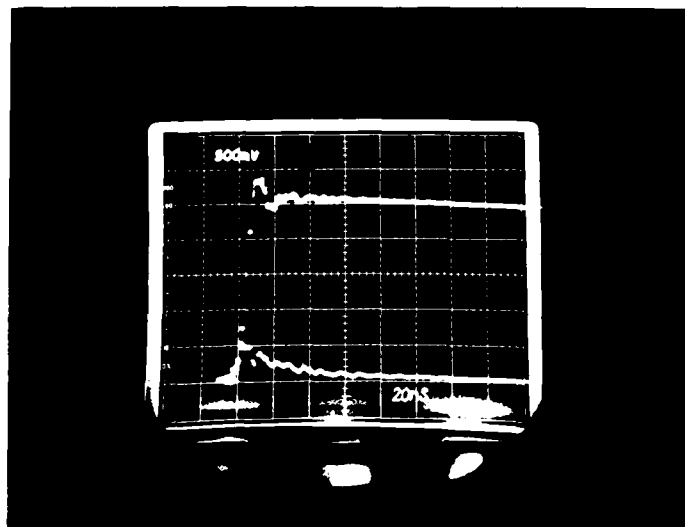
Date	5-28-85
Test Point	83R-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) <del>100</del> /div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	236



236

Date	5-28-85	
Test Point	83-BL-1/10-E	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	20	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		
Comments:		

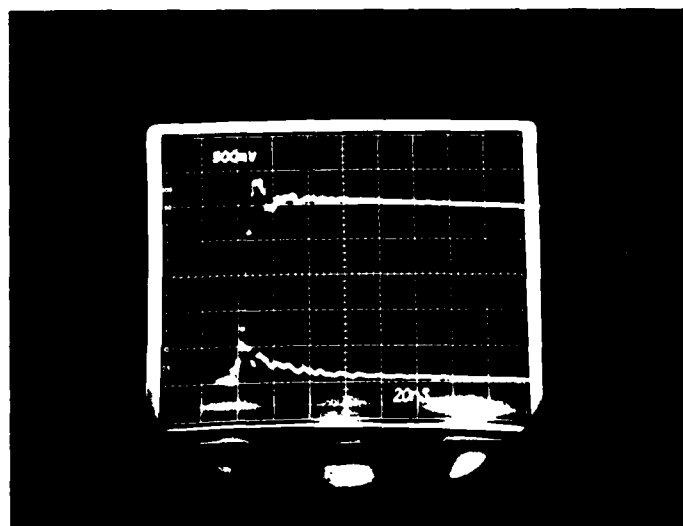
237



237

Date	5-28-85	
Test Point	83R-BL-1/10-E	
Amplification	0 dB	
Attenuation	0 dB	
Horizontal	20	ns/div 1
Vertical	.5V(120V)	mV/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	600V	
Data Link		
Comments:		

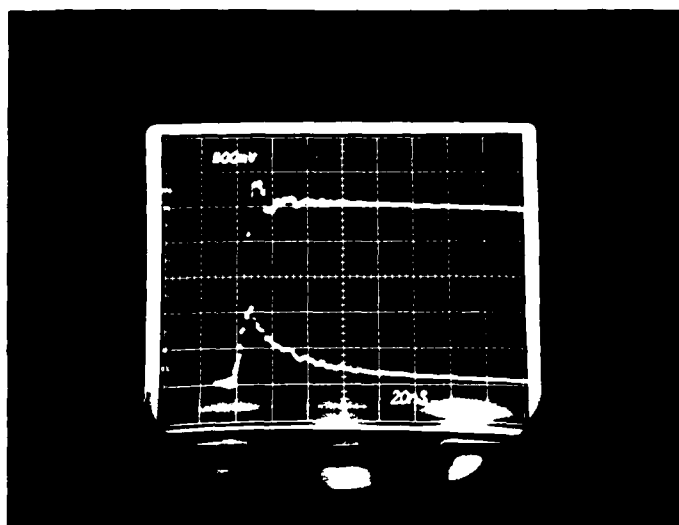
238



238

Date	5-28-85
Test Point	86-BL-110-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	

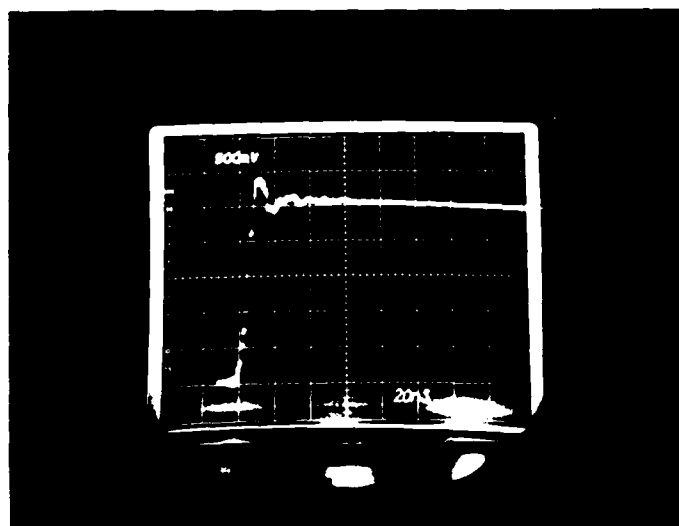
239



239

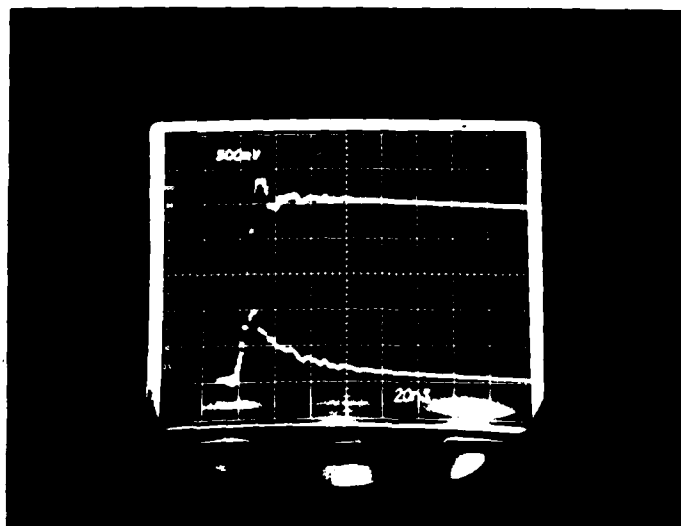
Date	5-28-85
Test Point	86R-BL-110-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	

240

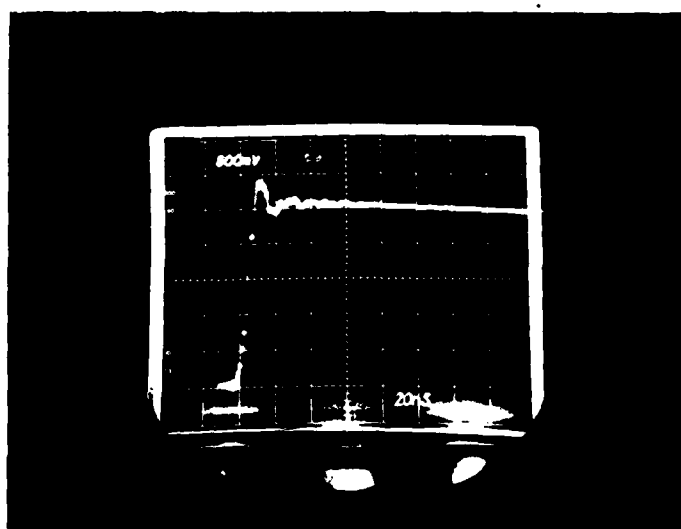


240

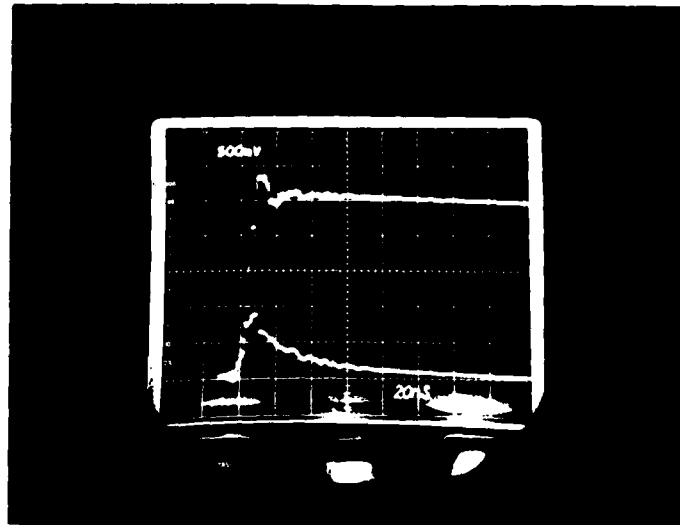
Date	5-28-85
Test Point	86-BL-110-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) 100/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	241



Date	5-28-85
Test Point	86R-BL-110-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) 100/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	242

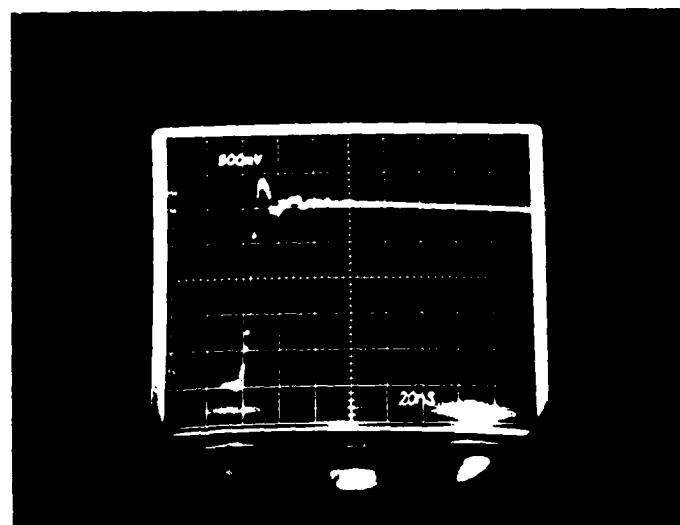


Date	5-28-85		
Test Point	86-BL-1/10-C		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:	243		



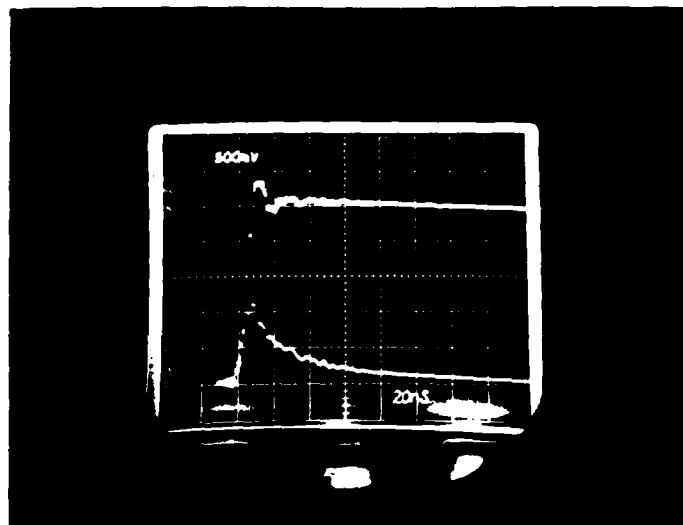
243

Date	5-28-85		
Test Point	86R-BL-1/10-C		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:	244		



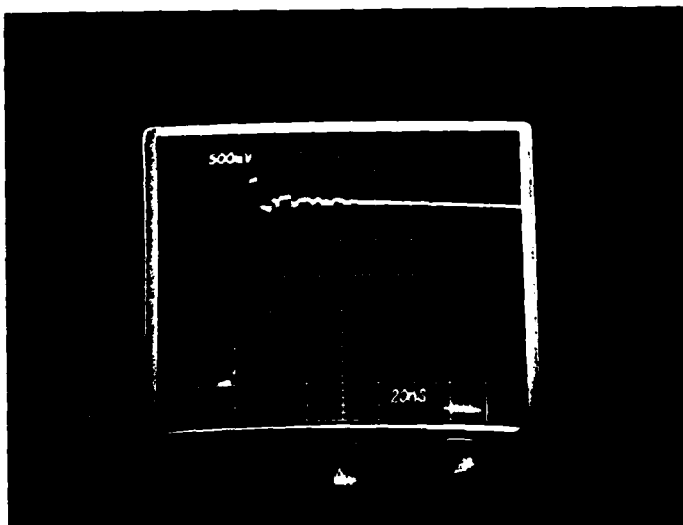
244

Date	5-28-85
Test Point	86-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) <del>ms</del> /div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	245



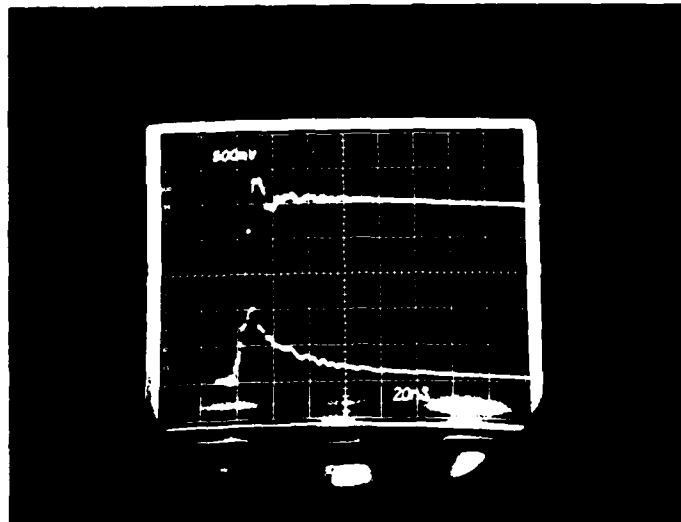
245

Date	5-28-85
Test Point	86R-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) <del>ms</del> /div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	246

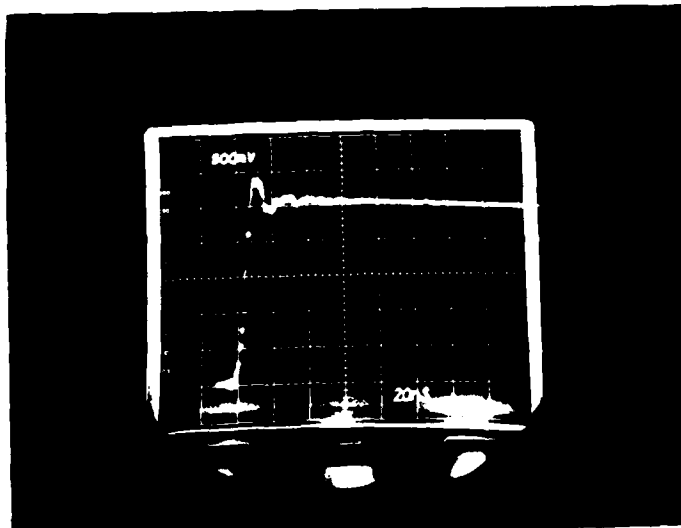


246

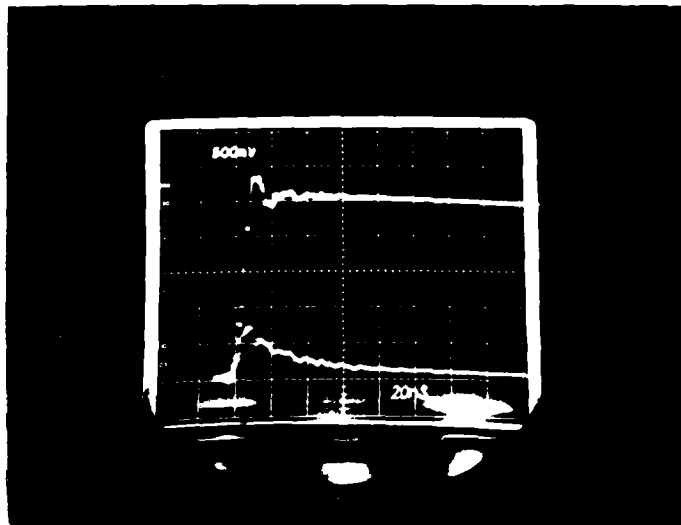
Date	5-28-85
Test Point	86-BL-1110-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) 100V/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	247



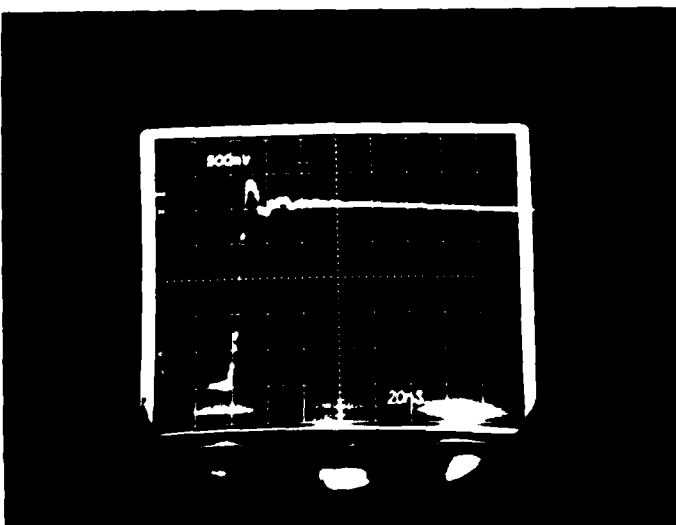
Date	5-28-85
Test Point	86R-BL-1110-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) 100V/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	248



Date	5-28-85		
Test Point	89-BL-1/10-A		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:	249		

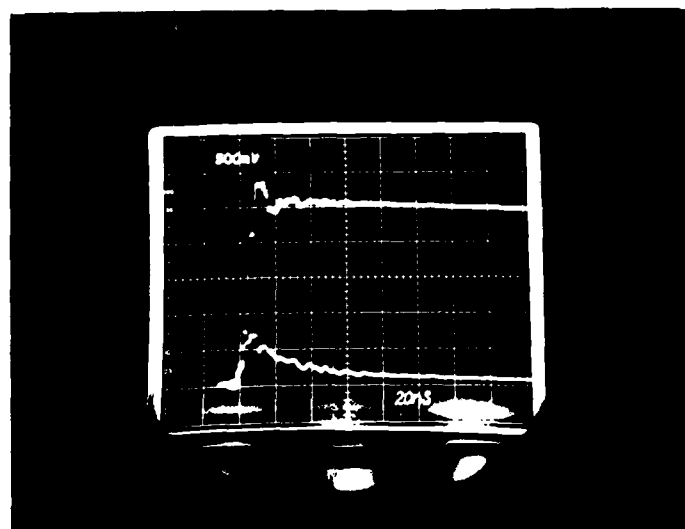


Date	5-28-85		
Test Point	89R-BL-1/10-A		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:	250		

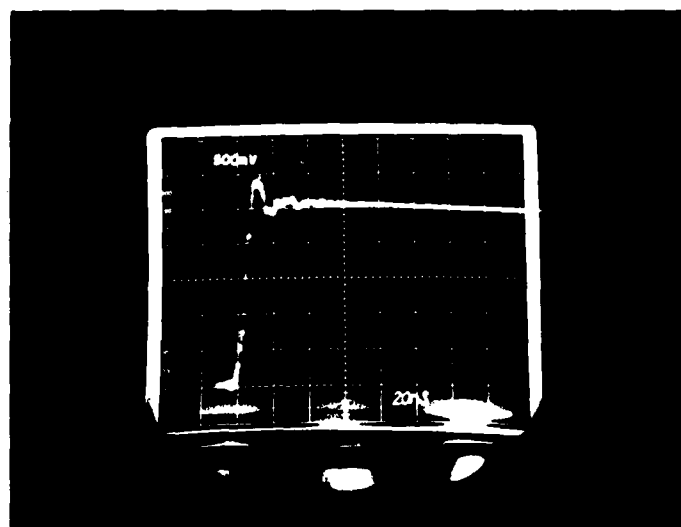




Date 5-28-85  
 Test Point 89-BL-110-B  
 Amplification 0dB  
 Attenuation 0dB  
 Horizontal 20ns/div 1  
 Vertical .5V(126V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 251

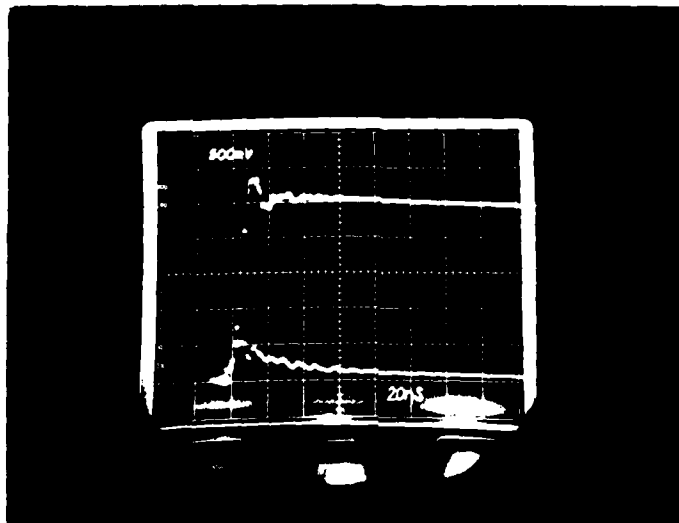


Date 5-28-85  
 Test Point 89R-BL-110-B  
 Amplification 0dB  
 Attenuation 0dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(126V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 252



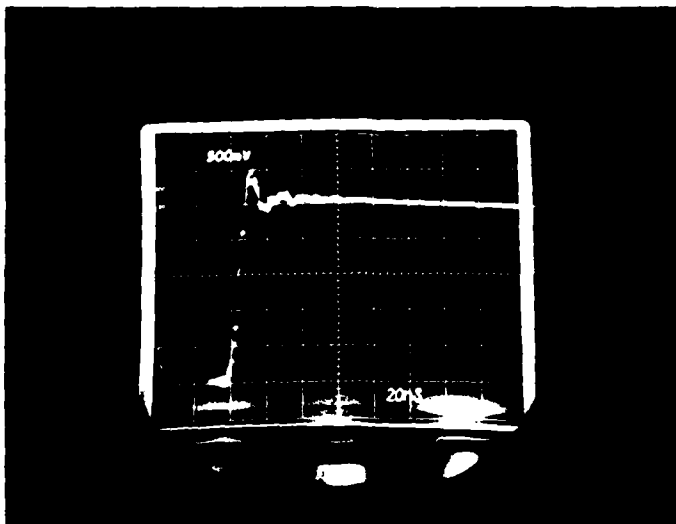
250

Date	5-28-85
Test Point	89-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	253



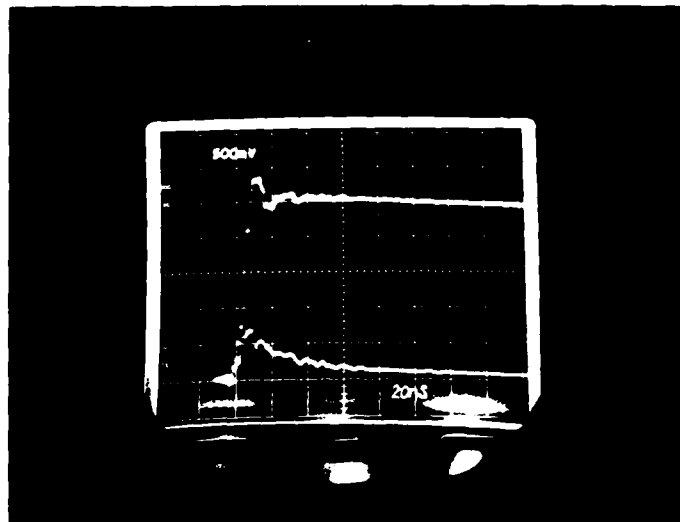
253

Date	5-28-85
Test Point	89R-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	254



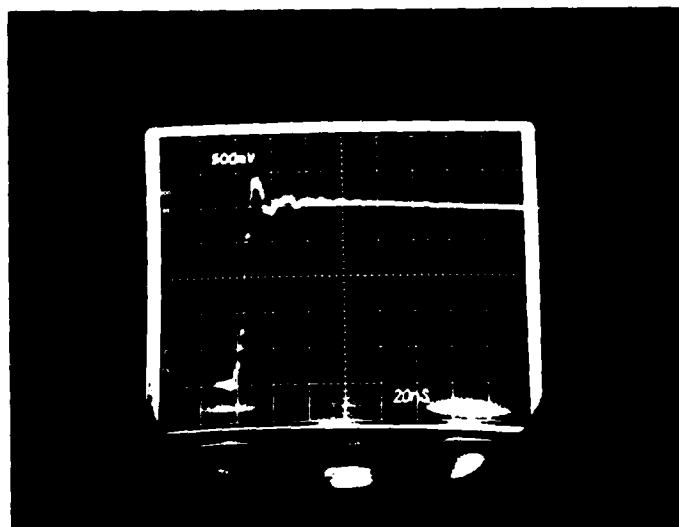
254

Date	5-28-85
Test Point	89-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5 (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	255



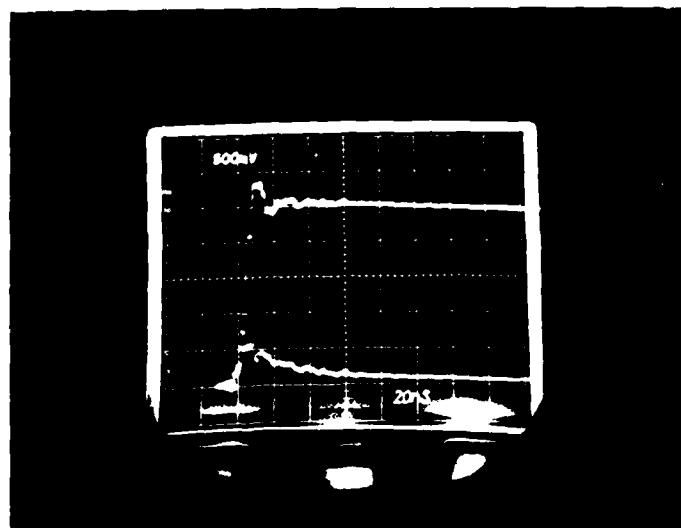
255

Date	5-28-85
Test Point	89R-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	256



256

Date **5-28-85**  
 Test Point **89-BL-1/10-E**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **20 ns/div 1**  
 Vertical **.5V (120V) mV/div 1**  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments: **257**



**257**

Date **5-28-85**  
 Test Point **89R-BL-1/10-E**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **20 ns/div 1**  
 Vertical **.5V (120V) mV/div 1**  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments: **258**

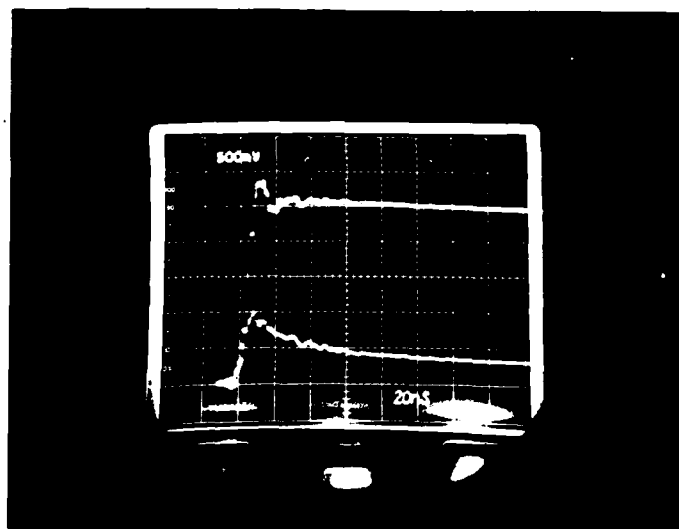


**258**

Date	5-28-85		
Test Point	92-BL-1/10-A		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			

Comments:

259

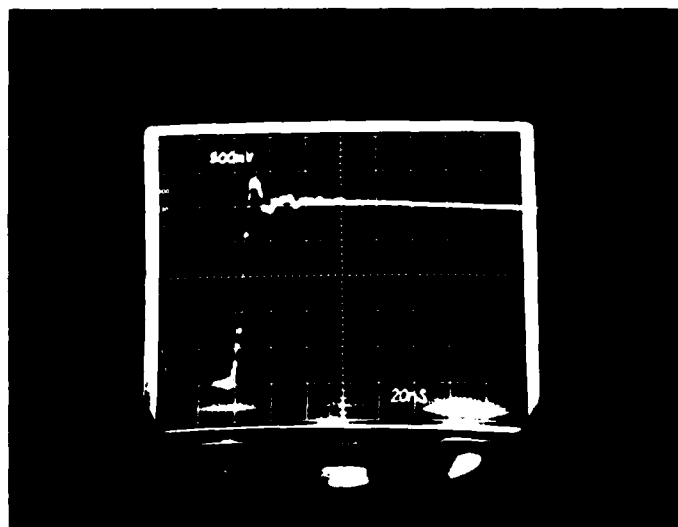


259

Date	5-28-85		
Test Point	92R-BL-1/10-A		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			

Comments:

260

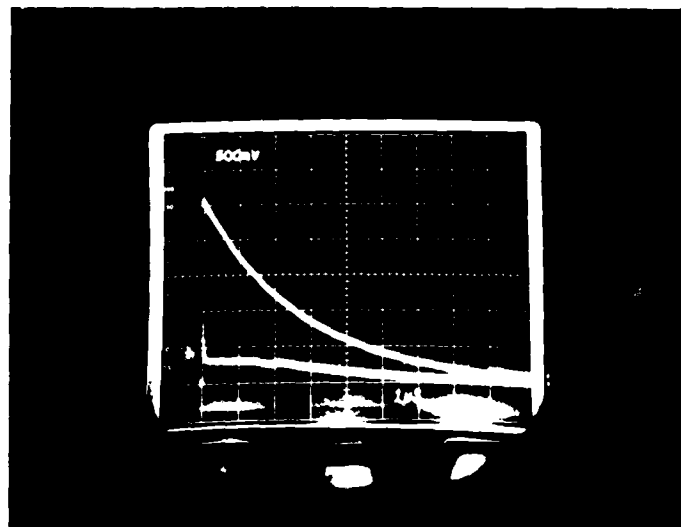


260

Date **5-28-85**  
 Test Point **92-BL-110-B**  
 Amplification **0dB**  
 Attenuation **0dB**  
 Horizontal **1μs** **ns/div 1**  
 Vertical **.5V(120V)** **μV/div 1**  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

261

1μs/div

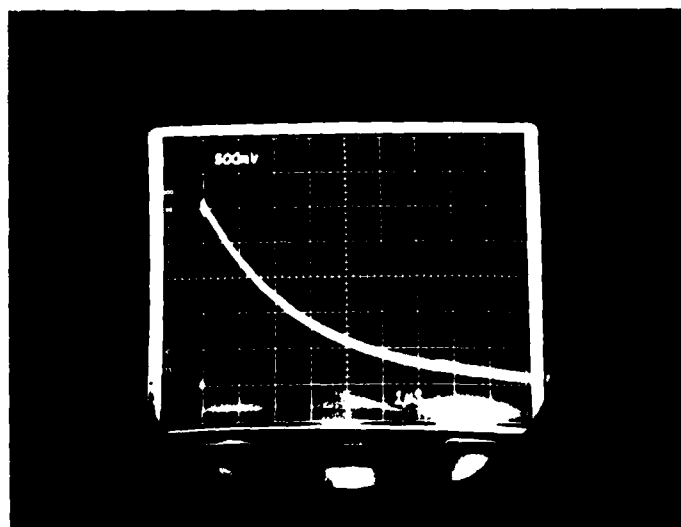


261

Date **5-28-85**  
 Test Point **92R-BL-110-B**  
 Amplification **0dB**  
 Attenuation **0dB**  
 Horizontal **1μs** **ns/div 1**  
 Vertical **.5V(120V)** **μV/div 1**  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

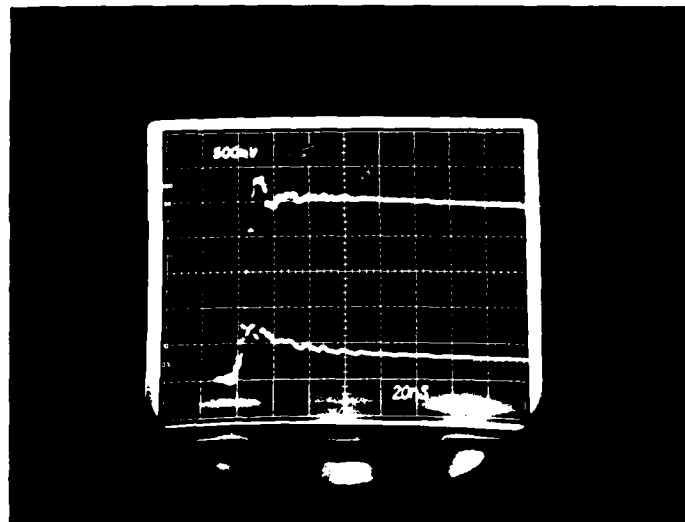
262

1μs/div



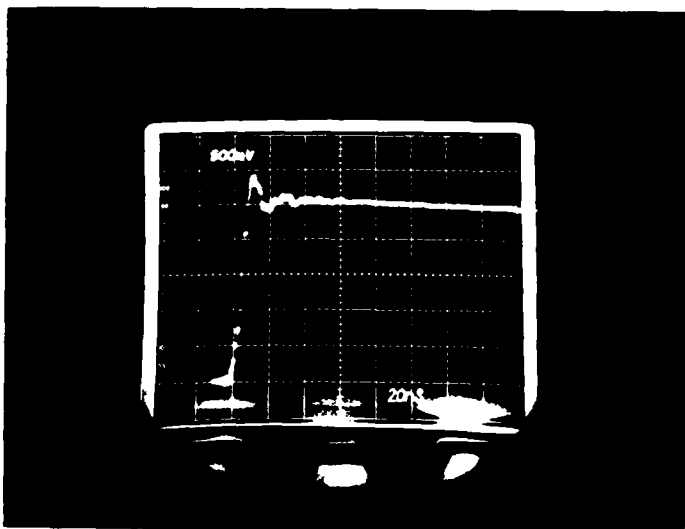
262

Date	5-28-85
Test Point	92-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5 (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600
Data Link	
Comments:	263
20ns/div	



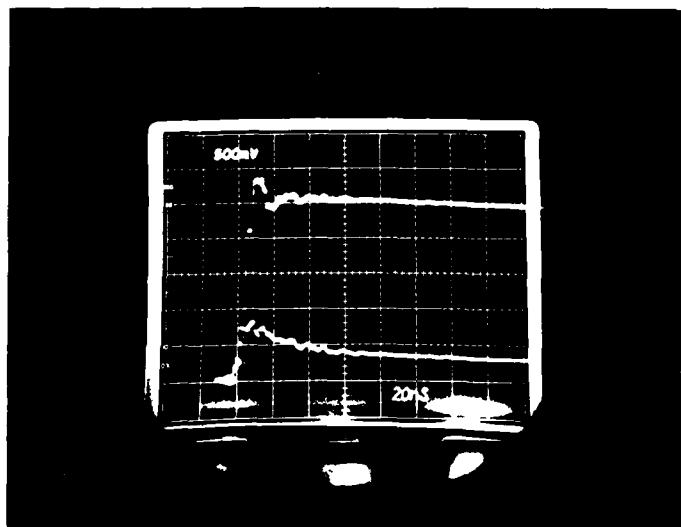
263

Date	5-28-85
Test Point	92R-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	264

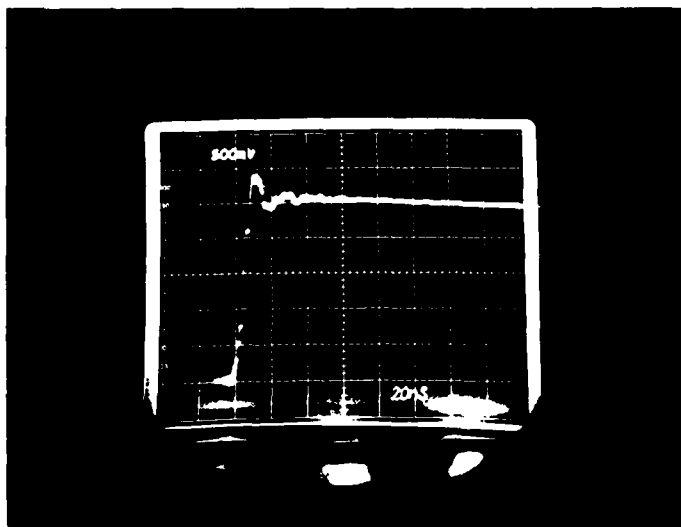


264

Date	5-28-85
Test Point	92-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	265



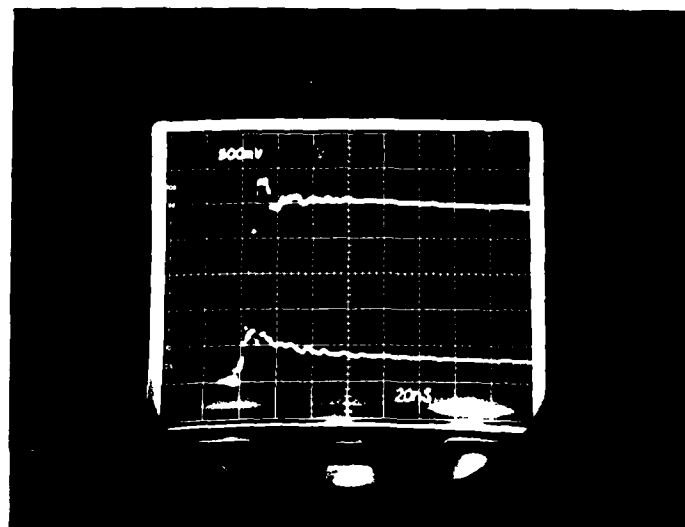
Date	5-28-85
Test Point	92R-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	266





Date **5-28-85**  
 Test Point **92-BL-1/10-E**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **20** ns/div 1  
 Vertical **.5V(120V)** mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

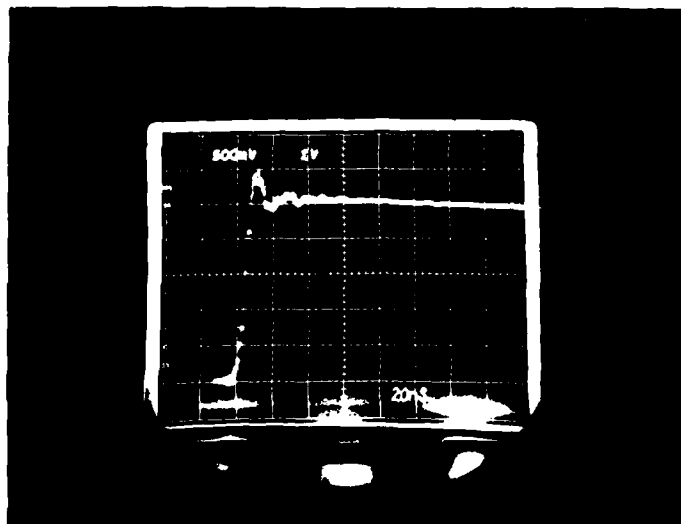
**267**



**267**

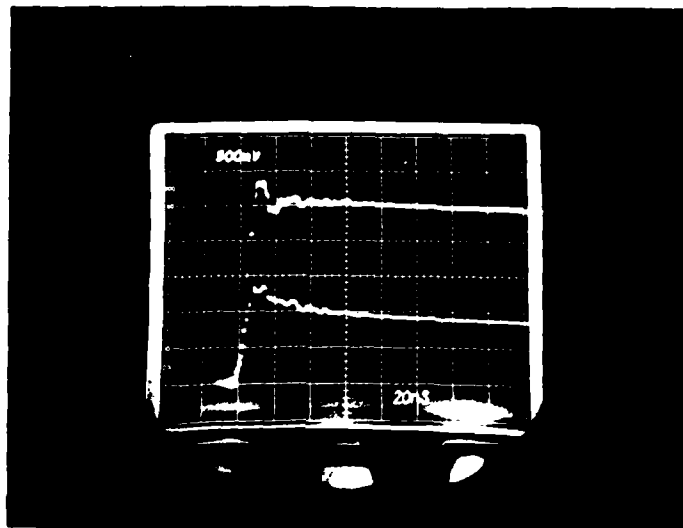
Date **5-28-85**  
 Test Point **92R-BL-1/10-E**  
 Amplification **0 dB**  
 Attenuation **0 dB**  
 Horizontal **20** ns/div 1  
 Vertical **.5V(120V)** mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level **600V**  
 Data Link  
 Comments:

**268**

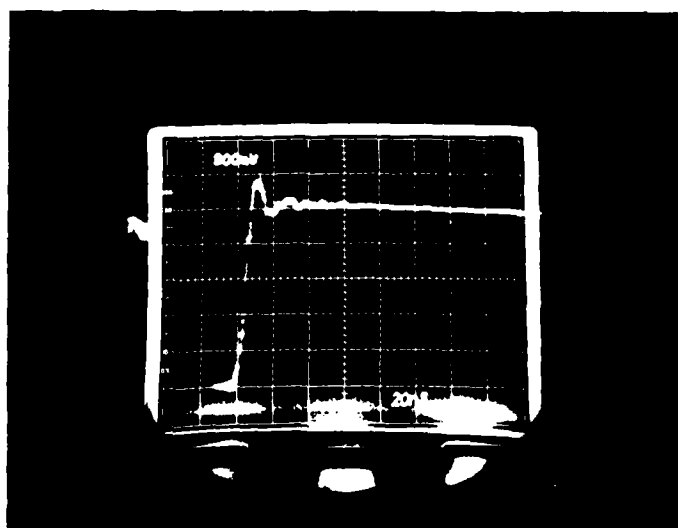


**268**

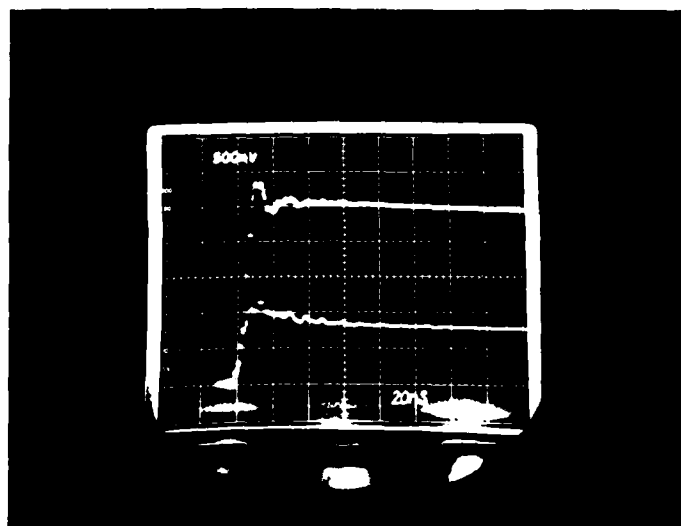
Date	5-28-85
Test Point	98-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	269
	LCE 130A



Date	5-28-85
Test Point	98R-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	270
	LCE 130A

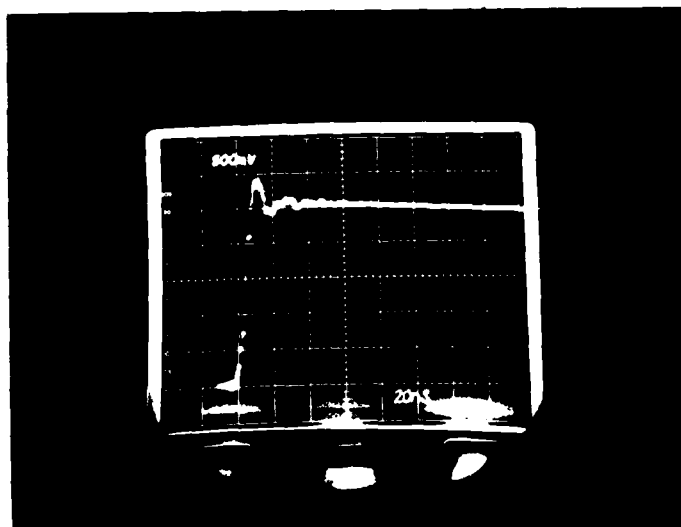


Date	5-28-85
Test Point	98-BL-1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	271



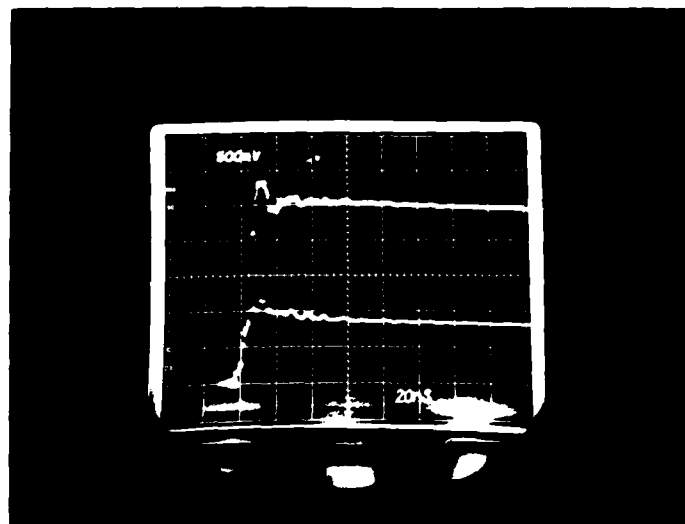
271

Date	5-28-85
Test Point	98R-BL-1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	272



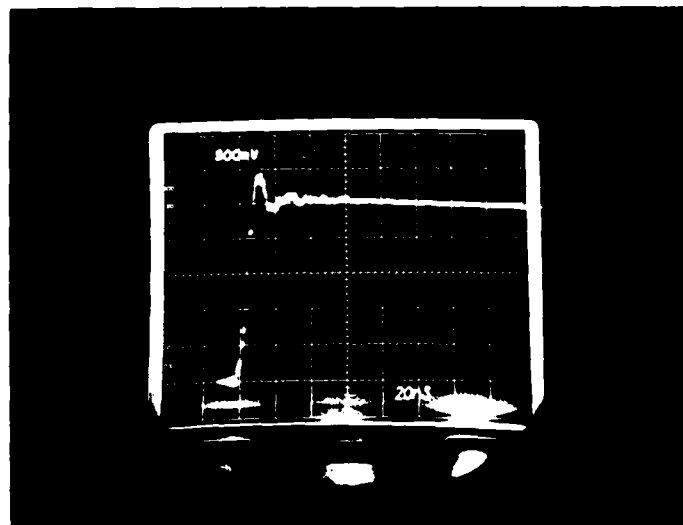
272

Date	5-28-85		
Test Point	99-BL-1/10-C		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	5V(120V)	ns/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:	273		



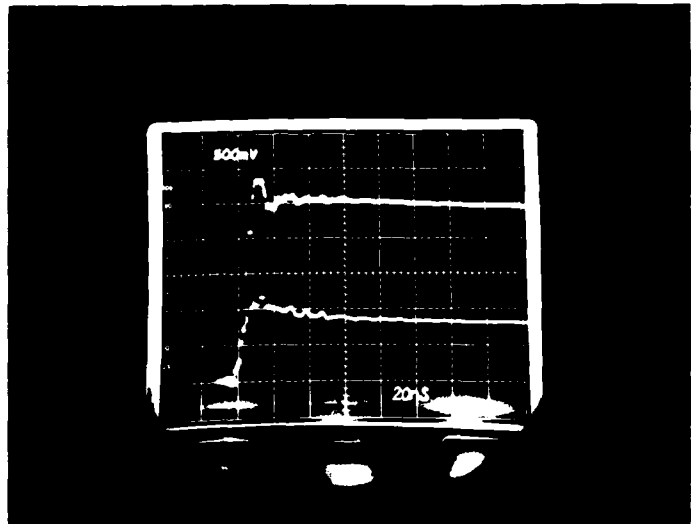
273

Date	5-28-85		
Test Point	98R-BL-1/10-C		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	5V(120V)	ns/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:	274		



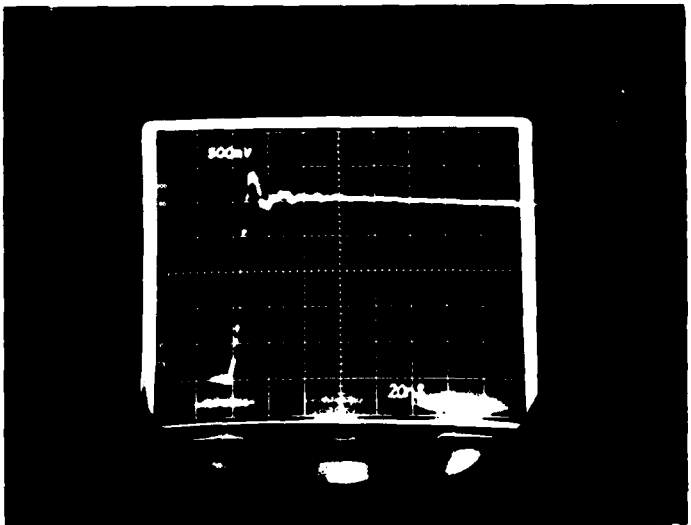
274

Date	5-28-85
Test Point	98-BL-1110-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) <del>5V</del> /div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	275



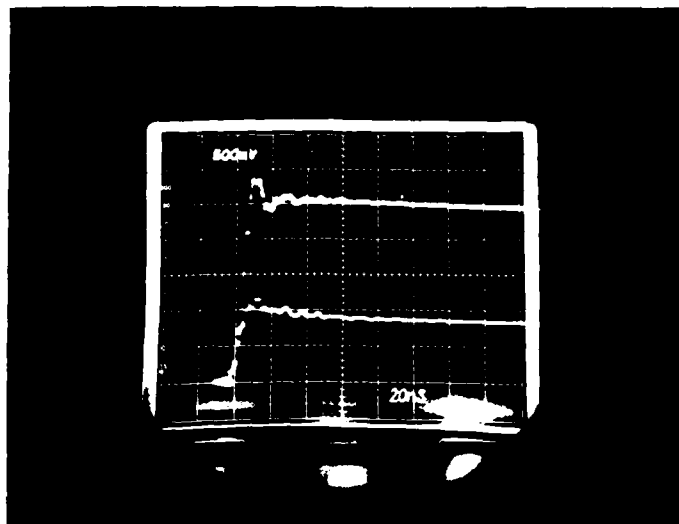
275

Date	5-28-85
Test Point	98R-BL-1110-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) <del>5V</del> /div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	276



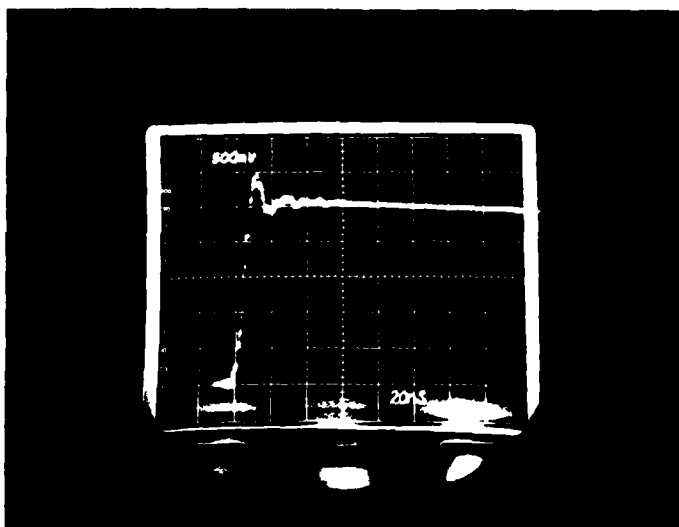
276

Date	5-28-85
Test Point	98-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	277



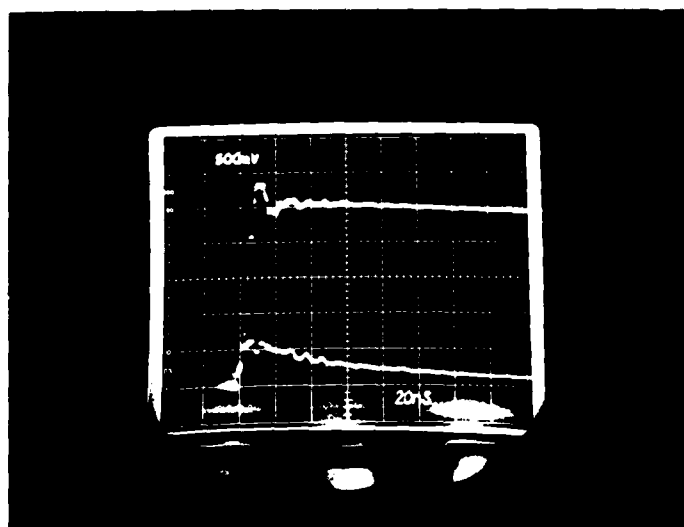
277

Date	5-28-85
Test Point	98R-BL-1/10-E
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	278



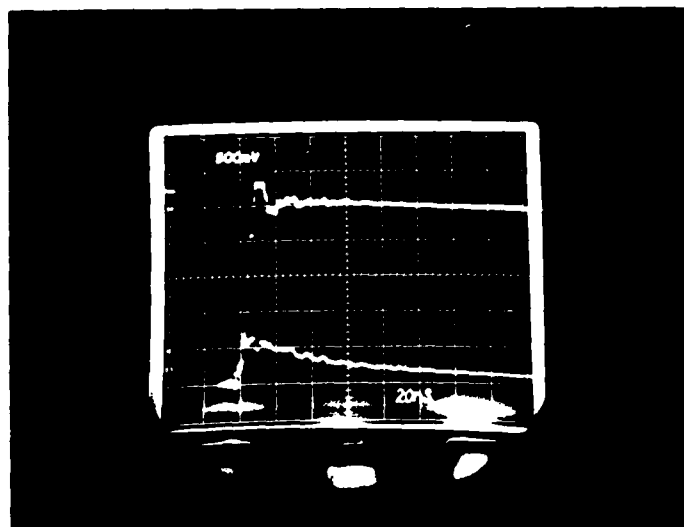
278

Date	5-28-85
Test Point	102-BL-1/16-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	279



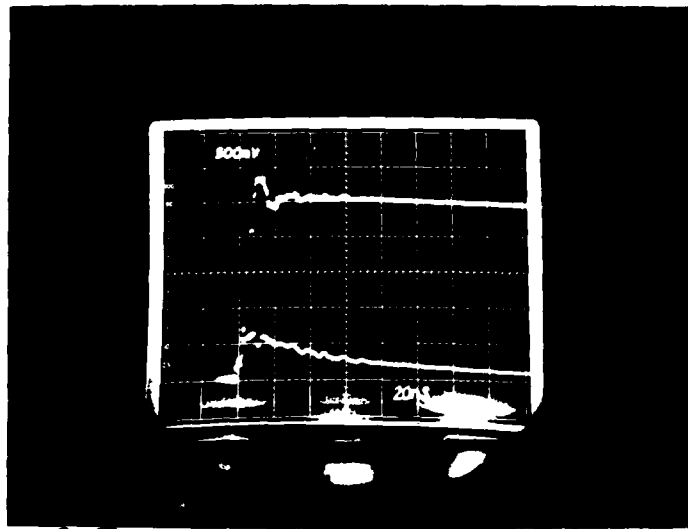
279

Date	5-28-85
Test Point	102R-BL-1/10-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	280



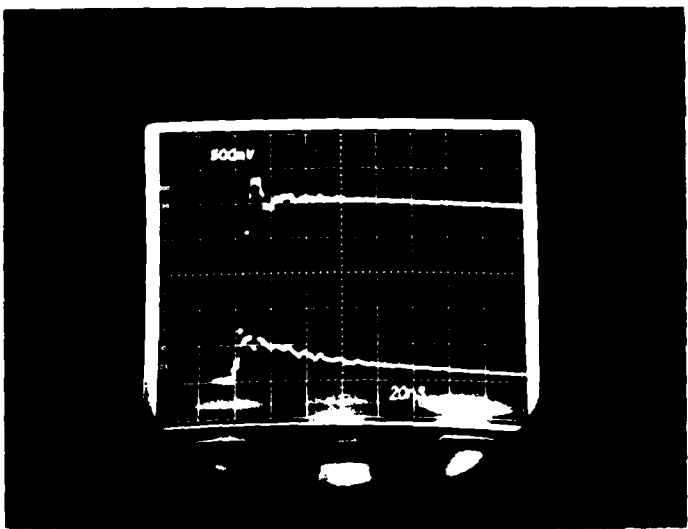
280

Date	5-28-85
Test Point	102-BL-1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	281



281

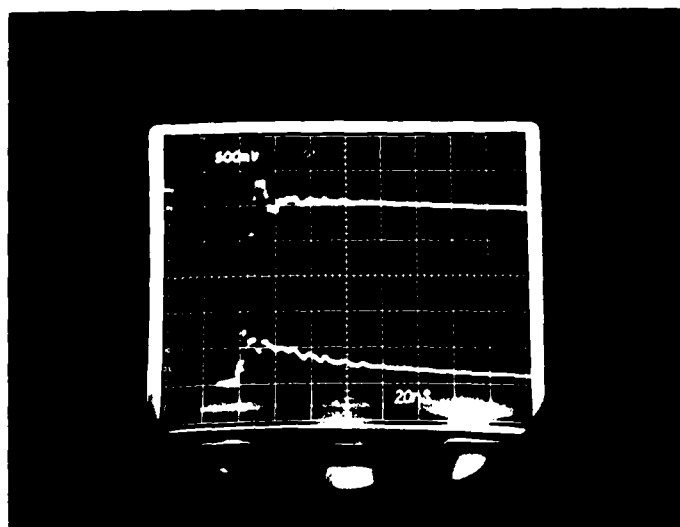
Date	5-28-85
Test Point	102R-BL-1/10-B
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	282



282

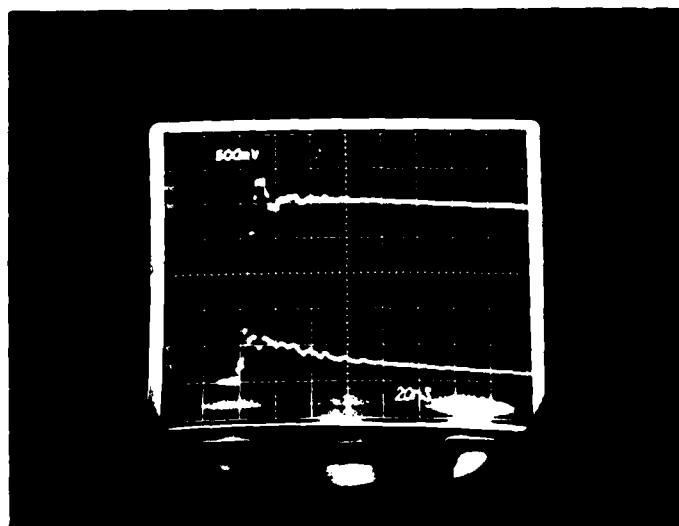


Date	5-28-85
Test Point	102-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	283



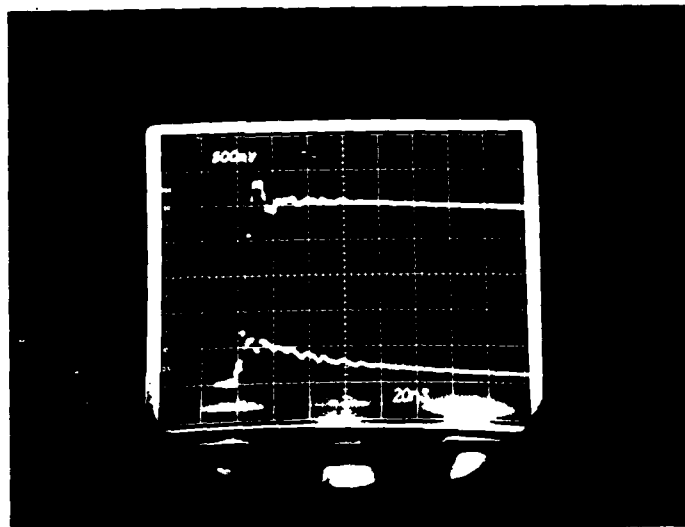
283

Date	5-28-85
Test Point	102R-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	284

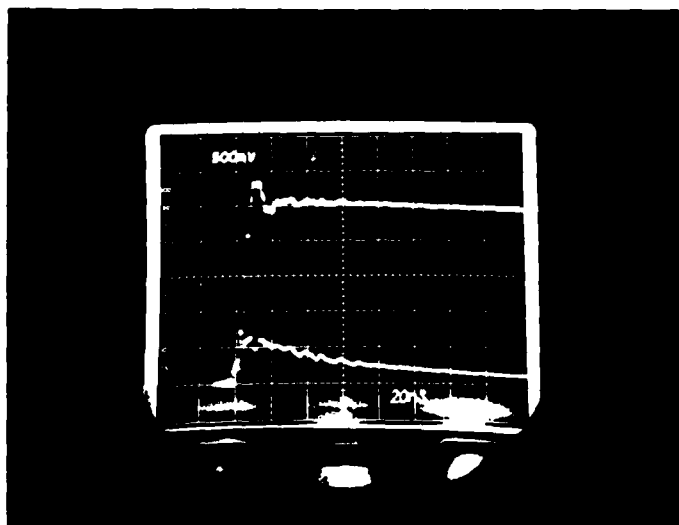


284

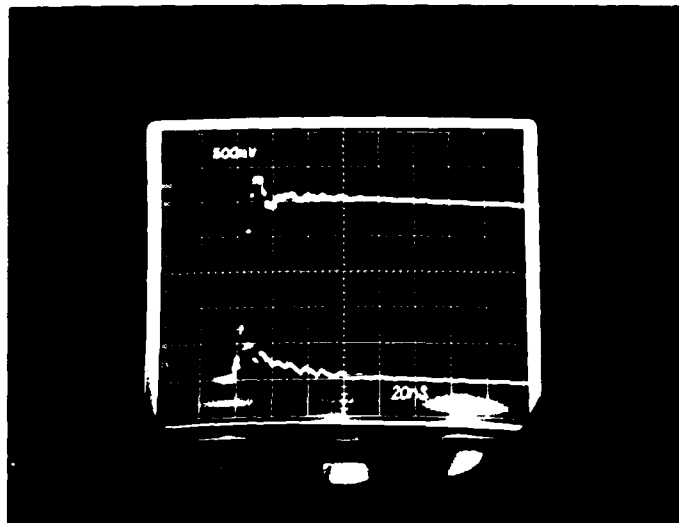
Date	5-28-85
Test Point	102-BL-1/16-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	285



Date	5-28-85
Test Point	102R-BH-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	286

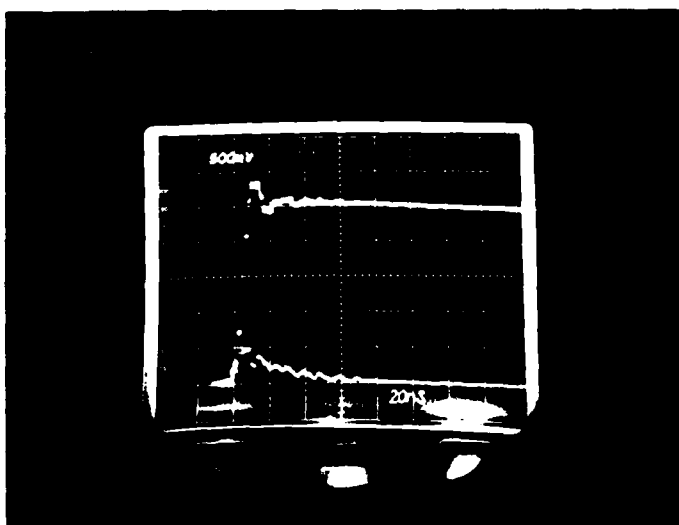


Date	5-28-85		
Test Point	103-BL-110-A		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600		
Data Link			
Comments:	287		



287

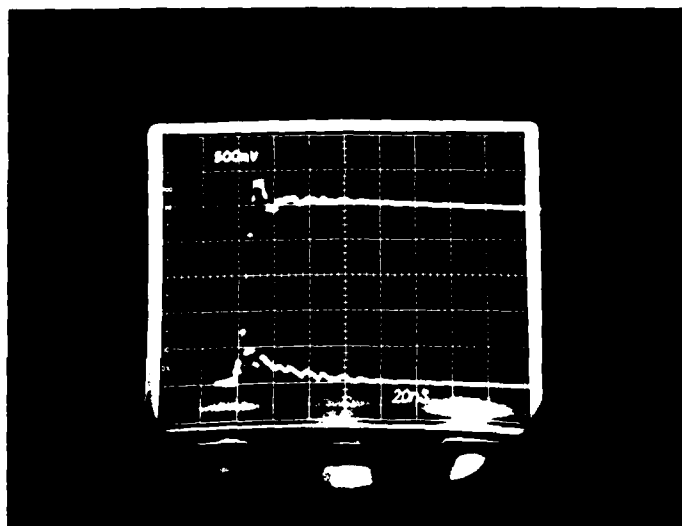
Date	5-28-85		
Test Point	103R-BL-110-A		
Amplification	0 dB		
Attenuation	0 dB		
Horizontal	20	ns/div	1
Vertical	.5V(120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	600V		
Data Link			
Comments:	288		



288

Date 5-28-85  
 Test Point 103-BL-1/10-B  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

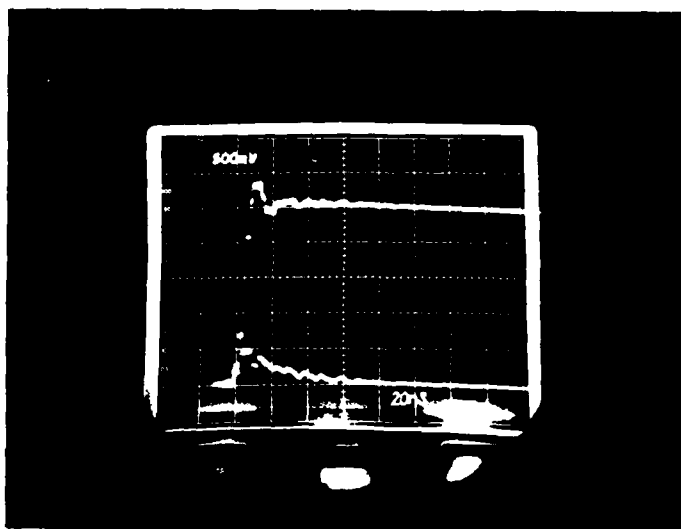
289



289

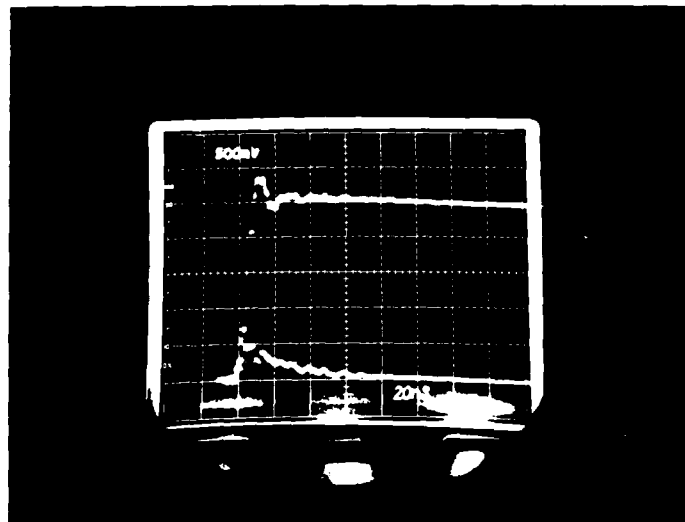
Date 5-28-85  
 Test Point 103R-BL-1/10-B  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

290

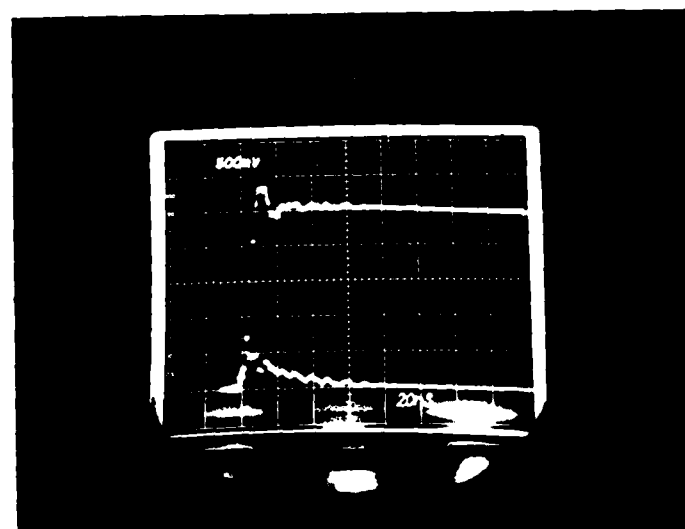


288-290-

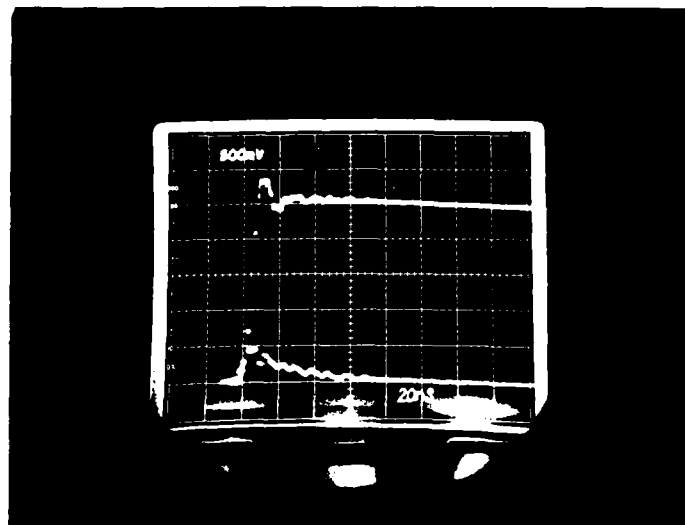
Date	5-28-85
Test Point	103-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	291



Date	5-28-85
Test Point	103R-BL-1/10-C
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	292

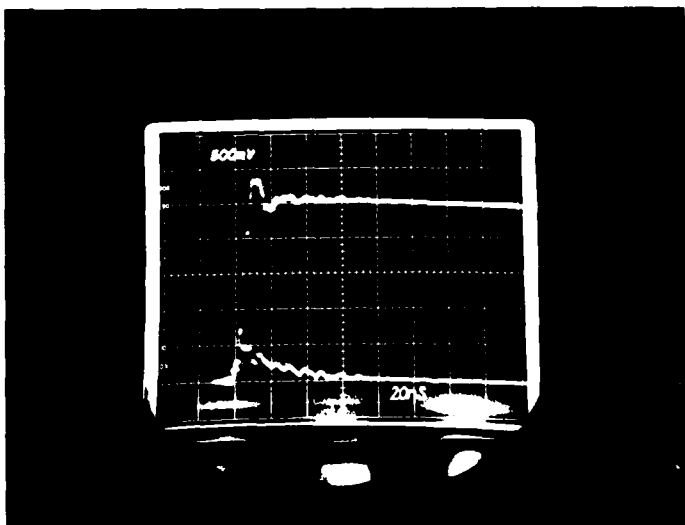


Date	5-28-85
Test Point	103-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	293



293

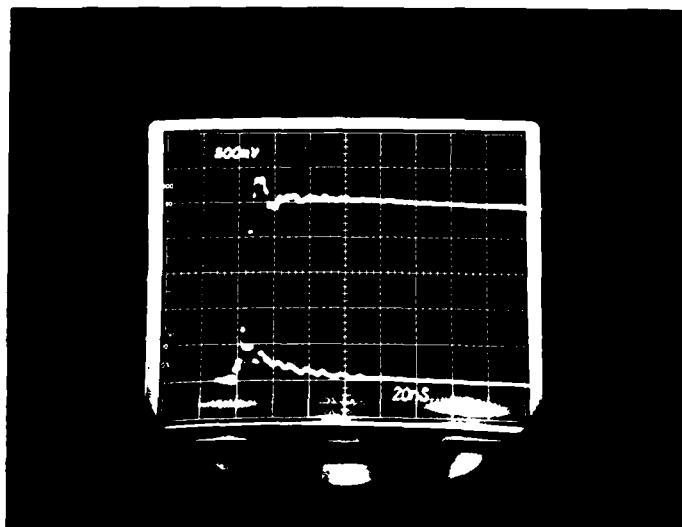
Date	5-28-85
Test Point	103R-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	294



294

Date 5-28-85  
 Test Point 103-BL-1/10-E  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V (120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

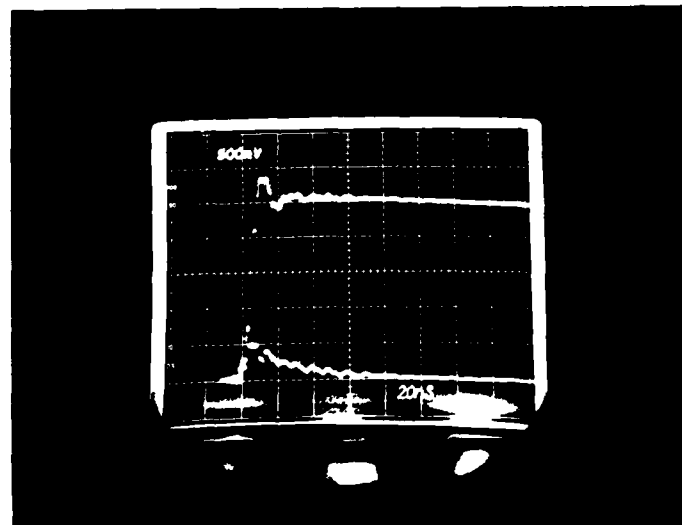
295



295

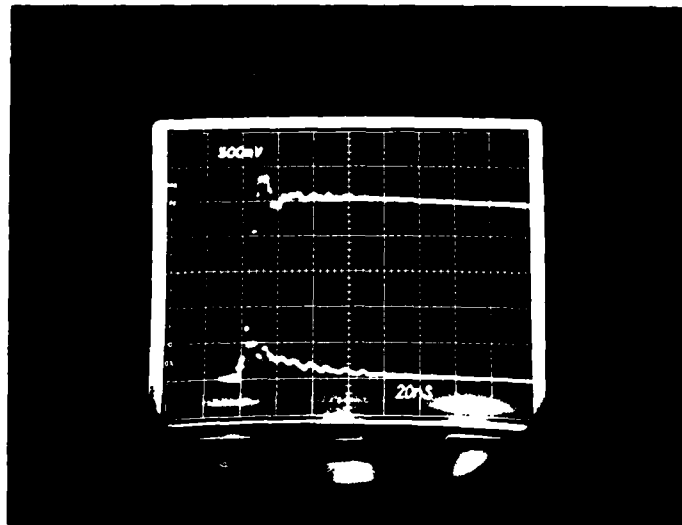
Date 5-28-85  
 Test Point 103R-BL-1/10-E  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V (120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

296

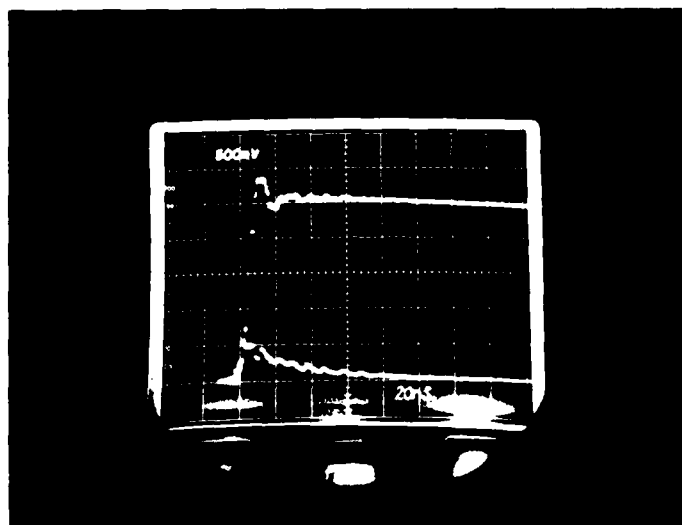


296

Date	5-28-85
Test Point	106-BL-110-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	297

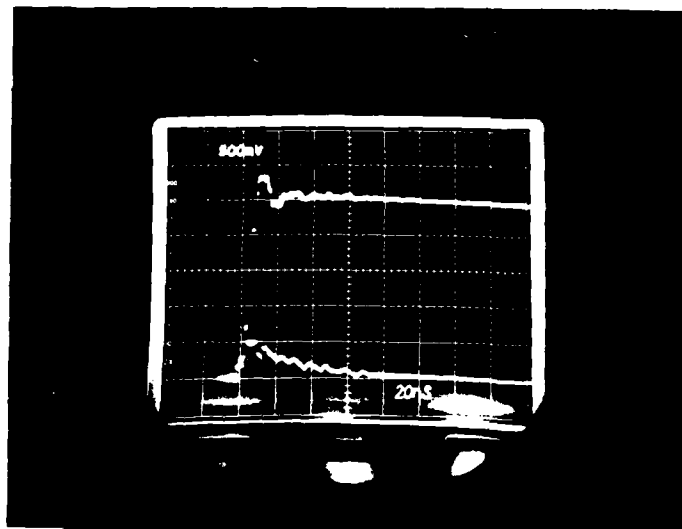


Date	5-28-85
Test Point	106R-BH-1-A
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V(120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	298

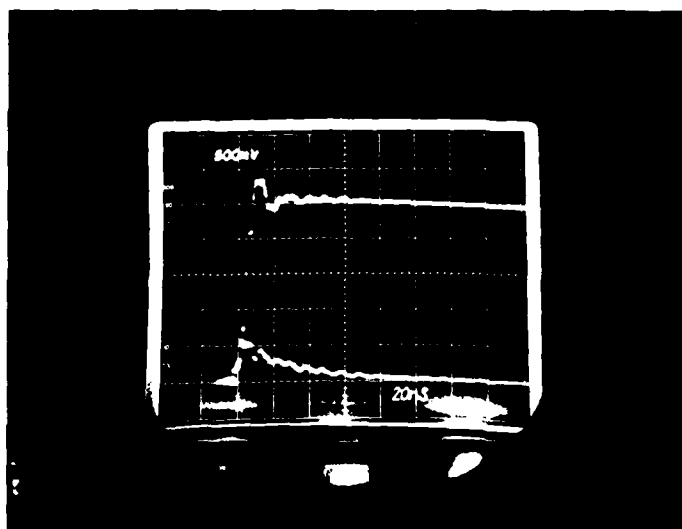




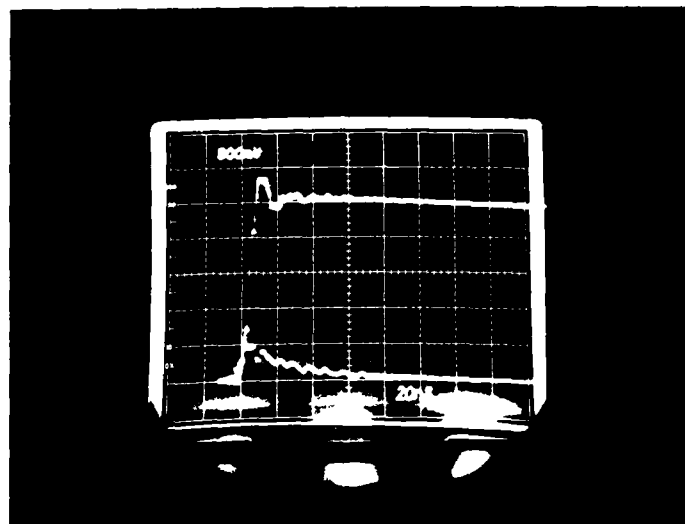
Date 5-28-85  
 Test Point 106-BL-1/10-B  
 Amplification 0dB  
 Attenuation 0dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 299



Date 5-28-85  
 Test Point 106R-BL-1/10-B  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments: 300

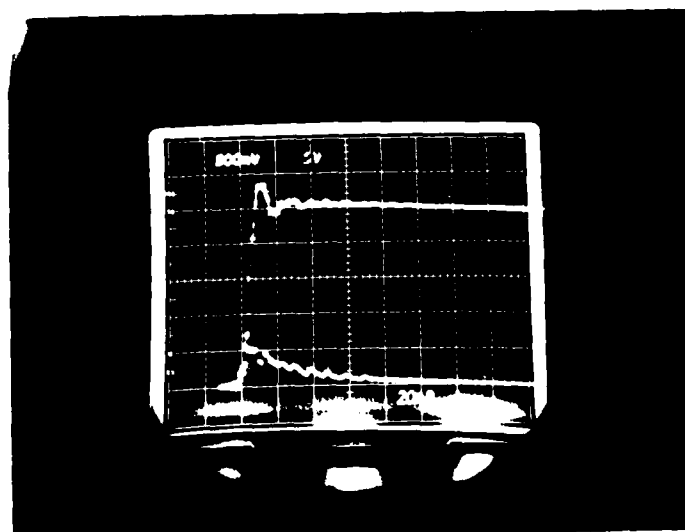


Date	5-28-85		
Test Point	106-BL-1/10-C		
Amplification	0dB		
Attenuation	0dB		
Horizontal	20	ns/div	1
Vertical	.5V (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:	301		



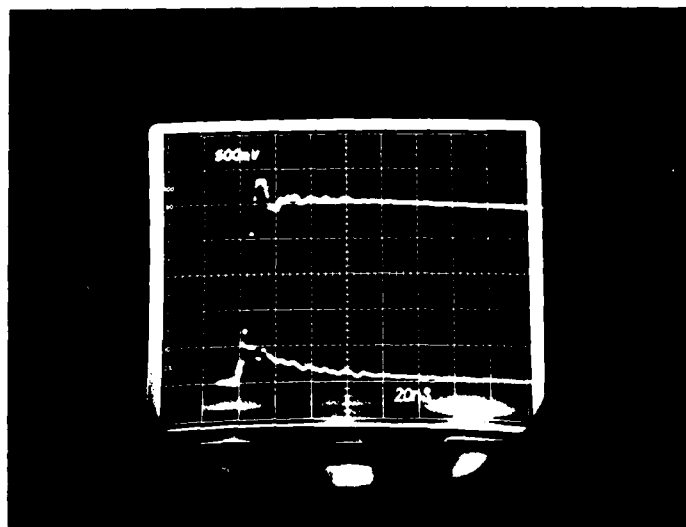
301

Date	5-28-85		
Test Point	106R-BL-1/10-C		
Amplification	0dB		
Attenuation	0dB		
Horizontal	20	ns/div	1
Vertical	.5V (120V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	600V		
Data Link			
Comments:	302		



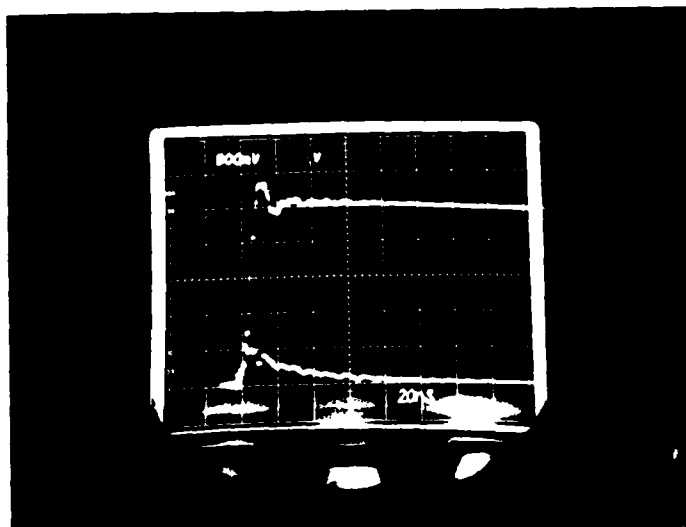
302

Date	5-28-85
Test Point	106-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	303



303

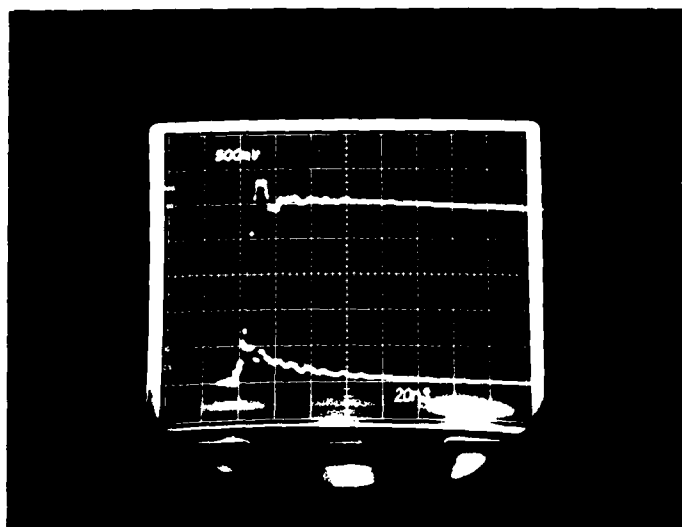
Date	5-28-85
Test Point	106R-BL-1/10-D
Amplification	0 dB
Attenuation	0 dB
Horizontal	20 ns/div 1
Vertical	.5V (120V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulse Level	600V
Data Link	
Comments:	304



304

Date 5-28-85  
 Test Point 106-BL-1/10-E  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

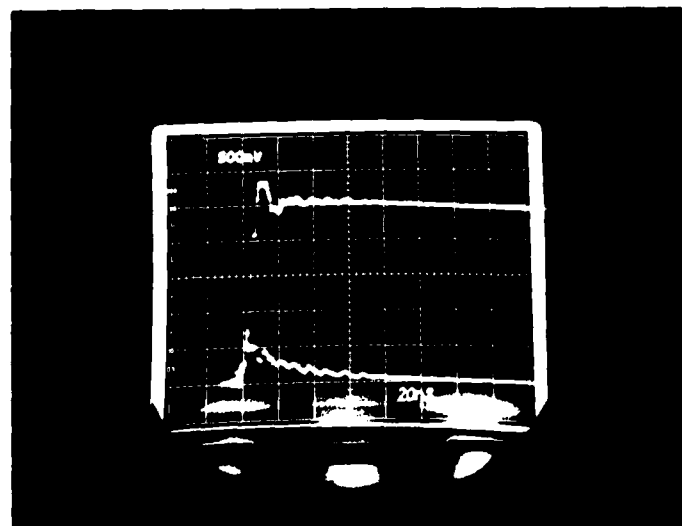
305



305

Date 5-28-85  
 Test Point 106R-BL-1/10-E  
 Amplification 0 dB  
 Attenuation 0 dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level 600V  
 Data Link  
 Comments:

306



306

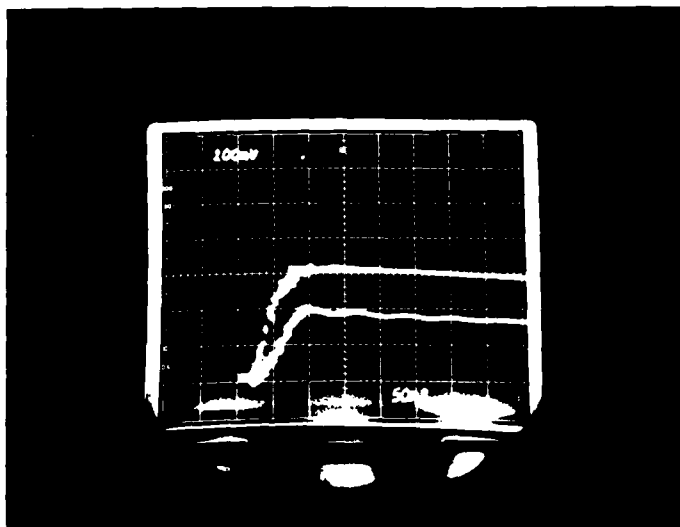
Date	5-30-85
Test Point	109-AL-1/10-Ø
Amplification	dB
Attenuation	dB
Horizontal	ns/div 1
Vertical	mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	+600V
Data Link	

Comments:

LEMON

470

"PULSE ON 'NEUT.'"



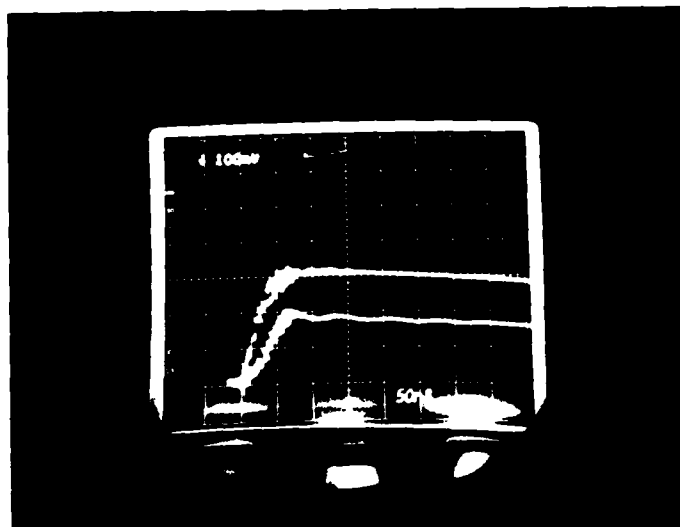
470

Date	5-30-85
Test Point	109R-AL-1/10-Ø
Amplification	dB
Attenuation	dB
Horizontal	ns/div 1
Vertical	mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	-600V
Data Link	

Comments:

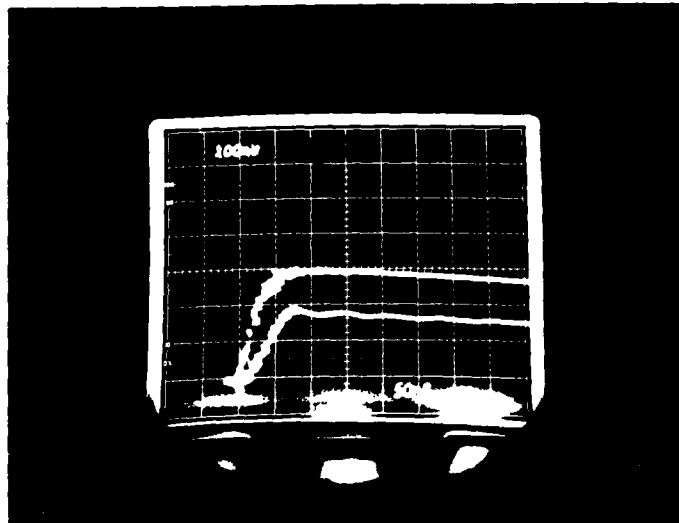
471

"PULSE ON 'NEUT.'"

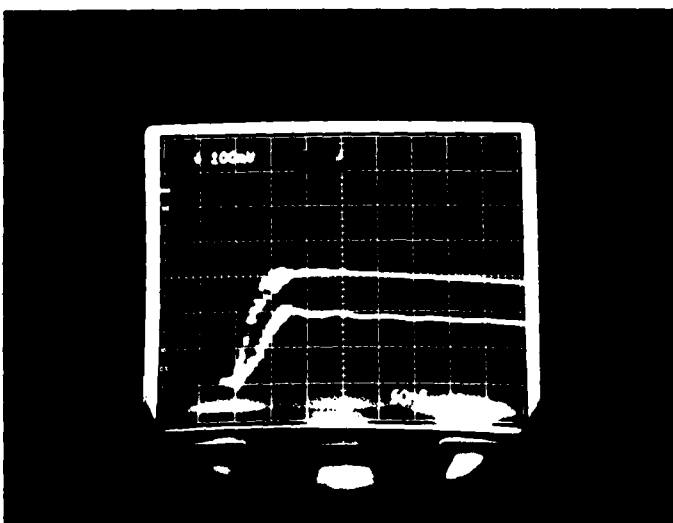


471

Date	5-30-85	
Test Point	109-AL-1/10-φ	
Amplification	0 dB	
Attenuation	20 dB	
Horizontal	50	ns/div 1
Vertical	.1V (190V)	mm/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	+600V	
Data Link		
Comments:	LEMON - 472	
	PULSE ON HOT	

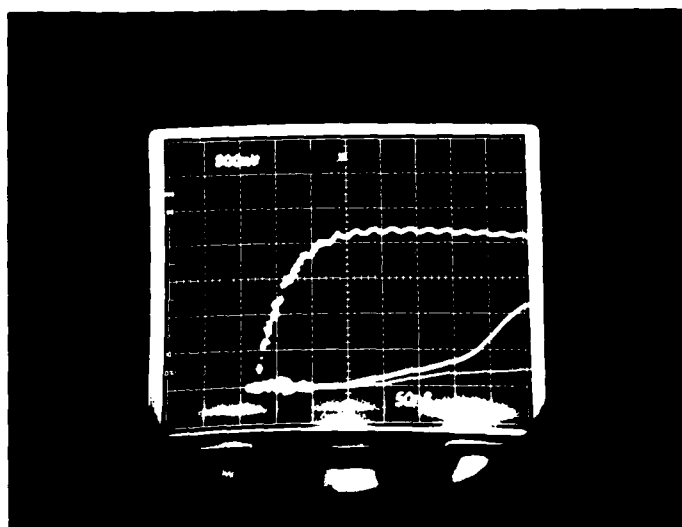


Date	5-30-85	
Test Point	109R-AL-1/10-φ	
Amplification	0 dB	
Attenuation	20 dB	
Horizontal	50	ns/div 1
Vertical	.1V (190V)	mm/div 1
Horizontal		ns/div 2
Vertical		ns/div 2
Configuration		
Pulser Level	-600V	
Data Link		
Comments:	473	
	PULSE ON HOT	



Date **5-31-85**  
 Test Point **110-AL-1/10-Ø**  
 Amplification **- dB**  
 Attenuation **- dB**  
 Horizontal **50** ns/div 1  
 Vertical **5V(140V)** mV/div 1  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulsar Level **+ 600 V**  
 Data Link

Comments: **478**  
**"COMMON LEAD"**

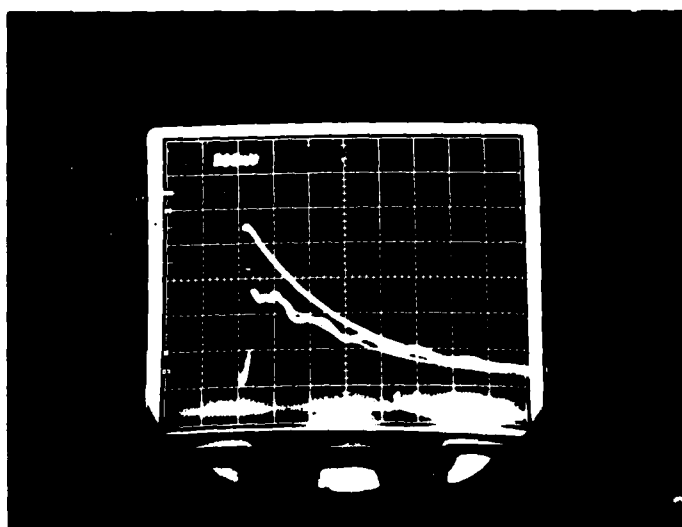


**478**

**REPEAT SHOT (479) AT 1µsec/div**

Date **5-31-85**  
 Test Point **110-AL-1/10-Ø**  
 Amplification **- dB**  
 Attenuation **- dB**  
 Horizontal **1µ** ns/div 1  
 Vertical **5V(140)** mV/div 1  
 Horizontal **ns/div 2**  
 Vertical **ns/div 2**  
 Configuration  
 Pulsar Level **+ 600V**  
 Data Link

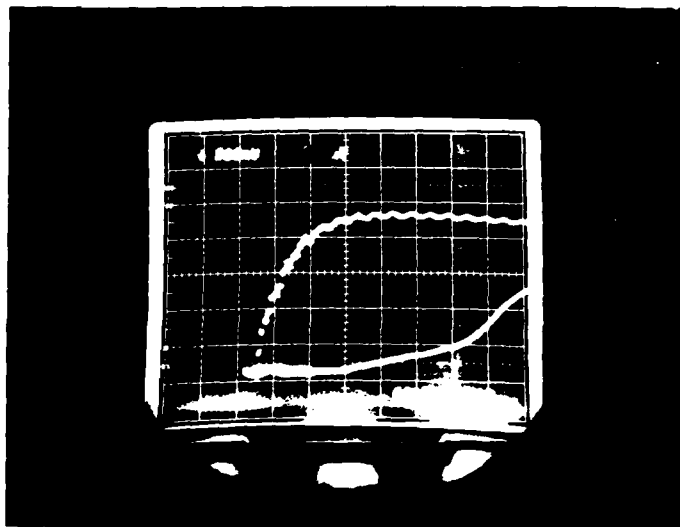
Comments:  
**"COMMON LEAD"**  
**"REPEAT ABOVE TEST"**



**479**

Date	5-31-85	
Test Point	110R-AL-1/10-0	
Amplification	- dB	
Attenuation	- dB	
Horizontal	50	ns/div 1
Vertical	.5V (140)	ms/div 1
Horizontal	ns/div 2	
Vertical	ns/div 2	
Configuration		
Pulse Level	- 600V	
Data Link		
Comments:	480	

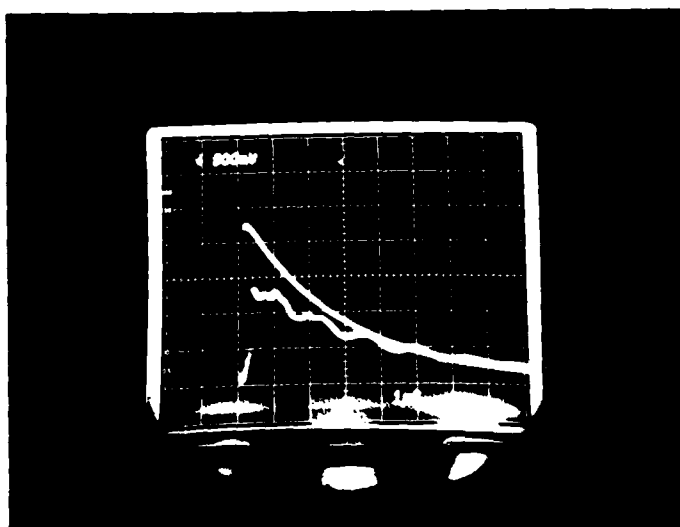
"COMMON LEAD"



480

Date	5-31-85	
Test Point	110R-AL-1/10-0	
Amplification	dB	
Attenuation	dB	
Horizontal	1000	ns/div 1
Vertical	.5 (140)	ms/div 1
Horizontal	ns/div 2	
Vertical	ns/div 2	
Configuration		
Pulse Level	- 600V	
Data Link		
Comments:	481	

"COMMON LEAD"



481



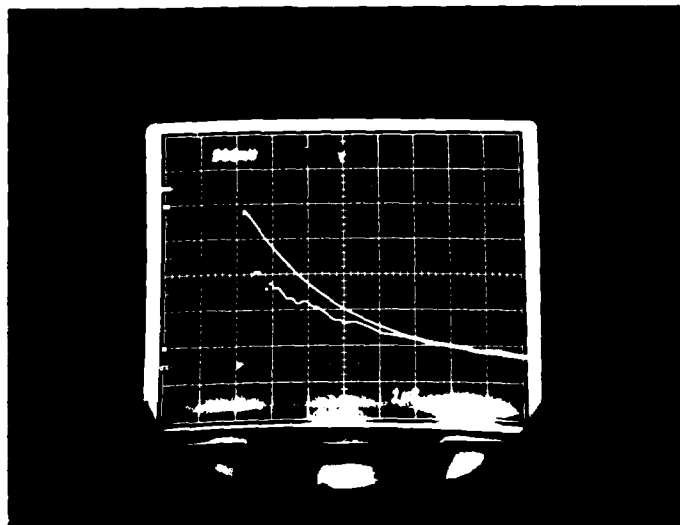
Date	5-31-85
Test Point	110-AL-1/10 Ø
Amplification	dB
Attenuation	dB
Horizontal	1000 ns/div 1
Vertical	.5V (140V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	+ 600 V
Data Link	

Comments:

PEACH

"HOT LEAD"

484



484

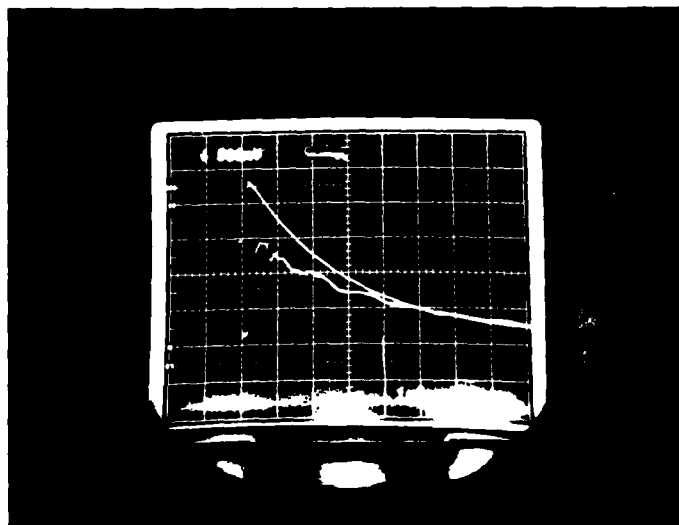
Date	5-31-85
Test Point	110R-AL-1/10-0
Amplification	dB
Attenuation	dB
Horizontal	1000 ns/div 1
Vertical	.5V (140) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	- 600 V
Data Link	

Comments:

"PEACH"

"HOT LEAD"

485



485

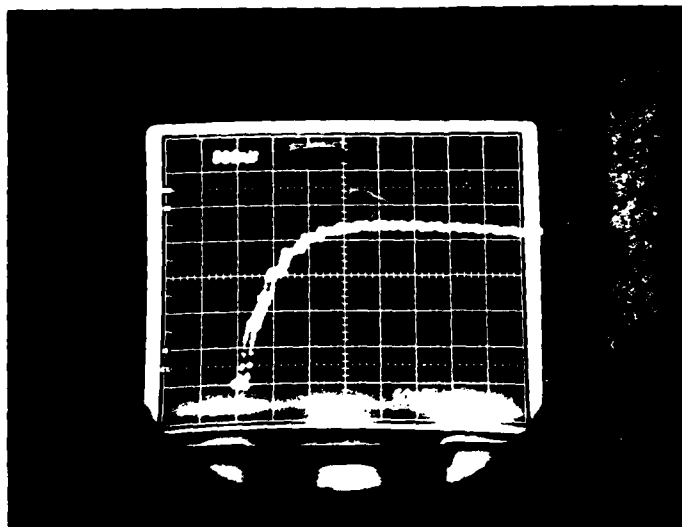
Date 5-31-85  
 Test Point 111-AL-1/10-Ø  
 Amplification - dB  
 Attenuation - dB  
 Horizontal 50 ns/div 1  
 Vertical 5V (140V) mv/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level + 600V  
 Data Link

Comments:

WABER

HOT TO COMMON  
 WITH REFERENCE PULSE

SCOPE DID NOT TRIGGER



490

Date 5-31-85  
 Test Point 111-AL-1/10-Ø  
 Amplification - dB  
 Attenuation - dB  
 Horizontal 50 ns/div 1  
 Vertical 5V (140V) mv/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level + 600V  
 Data Link

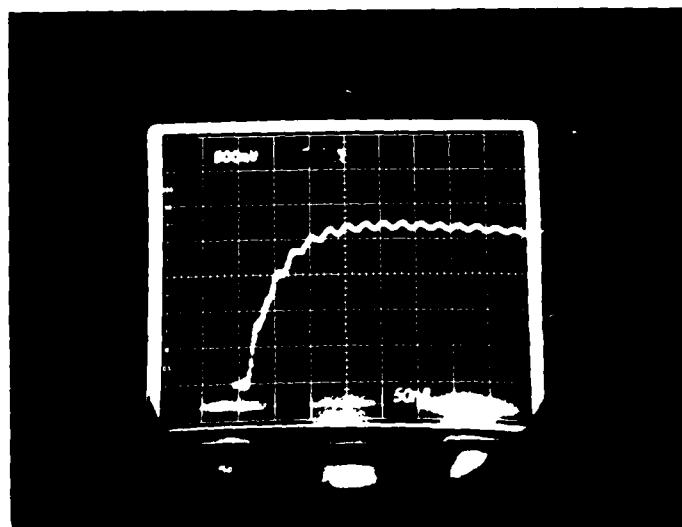
Comments:

- WABER -

491

COMMON TO GROUND  
 WITH REFERENCE -

- NOT WORKING -  
SCOPE DID NOT TRIGGER

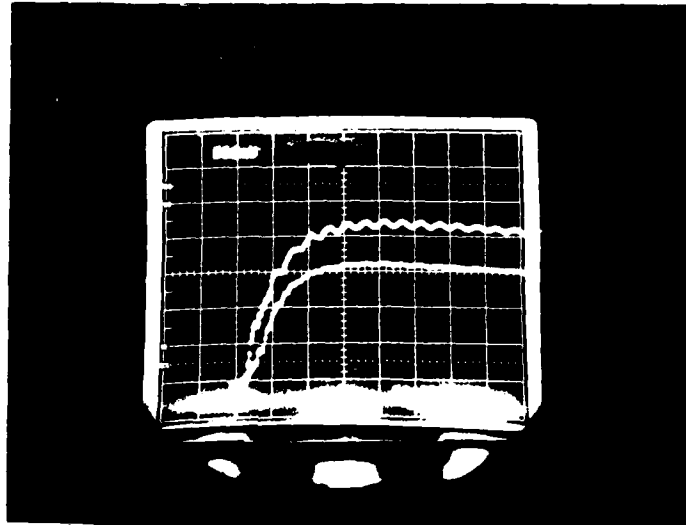


491

Date 5-31-85  
 Test Point III-AL-1/10-Ø  
 Amplification dB  
 Attenuation — dB  
 Horizontal 50 ns/div 1  
 Vertical 5V(140) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level + 600 V  
 Data Link

Comments: 495  
WABER

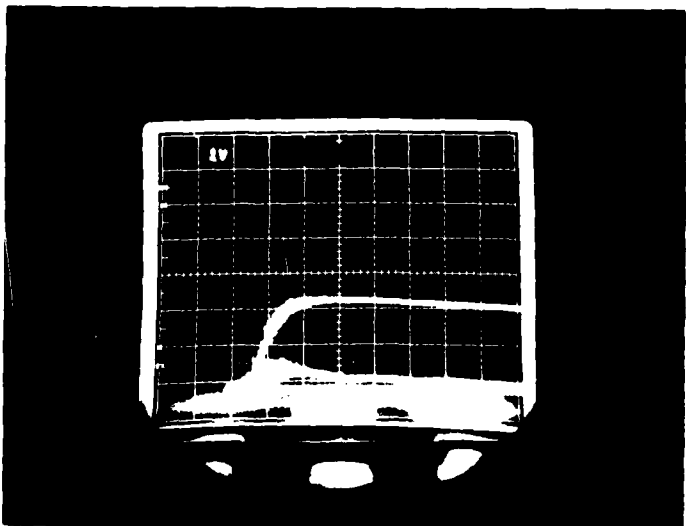
HOT TO COMMON TIED TO GND



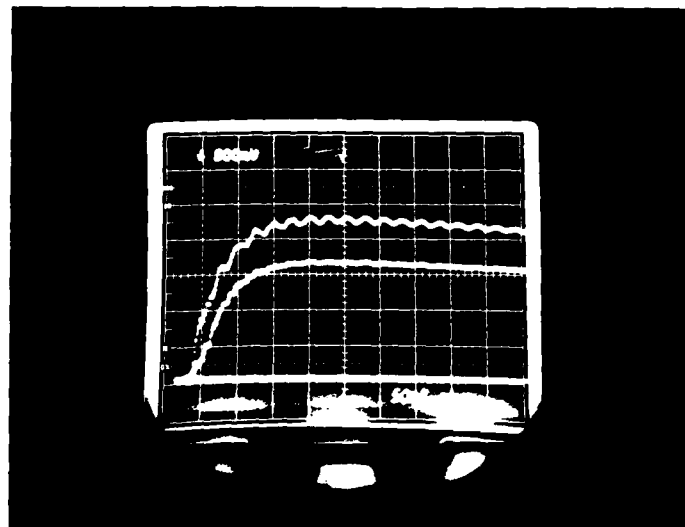
Date 5-31-85  
 Test Point III-CL-1/10-Ø  
 Amplification dB  
 Attenuation 20 dB  
 Horizontal 50 ns/div 1  
 Vertical 1V(1900V) mV/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level + 4500 V  
 Data Link

Comments: 496  
WABER

HOT TO COMMON TIED TO GND

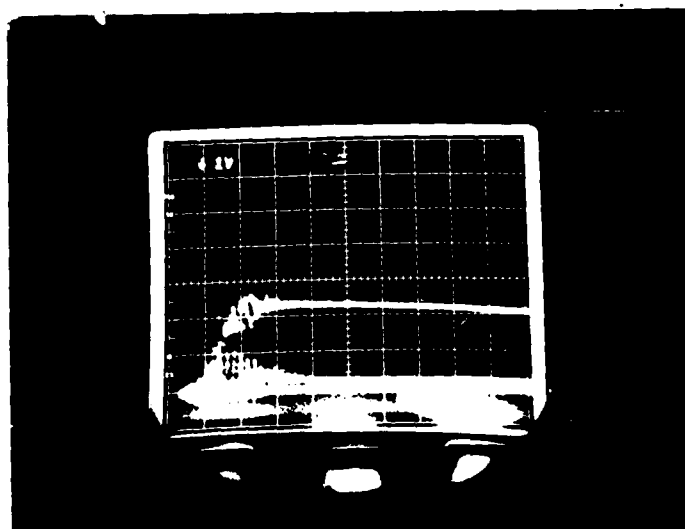


Date	5-31-85		
Test Point	111R-AL-1/10-B		
Amplification	dB		
Attenuation	- dB		
Horizontal	50	ns/div	1
Vertical	.5V(140V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	-600V		
Data Link			
Comments:	WABER 497		



HOT TO COMMON TIED TO  $\frac{1}{2}$

Date	5-31-85		
Test Point	111R-CL-1/10-B		
Amplification	dB		
Attenuation	20	dB	
Horizontal	50	ns/div	1
Vertical	1V(1900V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	-4500V		
Data Link			
Comments:	WABER 498		



HOT TO COMMON TIED TO  $\frac{1}{2}$

AD-A164 435

ELECTROMAGNETIC PULSE/TRANSIENT THREAT TESTING OF  
PROTECTION DEVICES FOR. (U) ELECTROSPACE SYSTEMS INC  
ARLINGTON VA D BODSON ET AL. 31 OCT 85

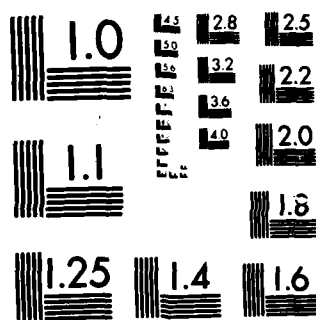
3/3

UNCLASSIFIED

NCS-TIB-85-10-VOL-3-SEC-4 DCA100-85-C-0010 F/G 20/14

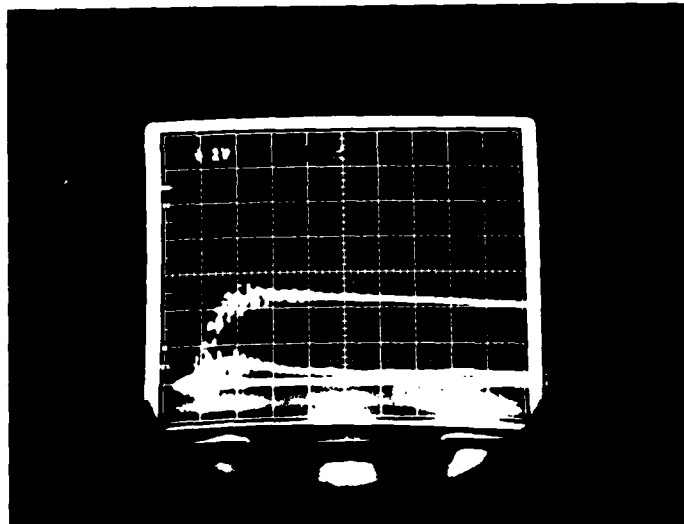
NL





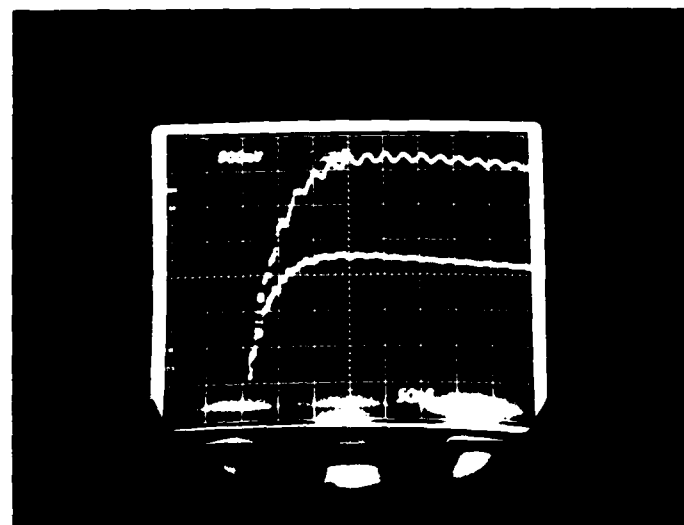
MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

Date	5-31-85
Test Point	111R-CL-1/10-A
Amplification	dB
Attenuation	20 dB
Horizontal	50 ns/div 1
Vertical	1V (1900V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	-4500V
Data Link	
Comments:	WABER 499



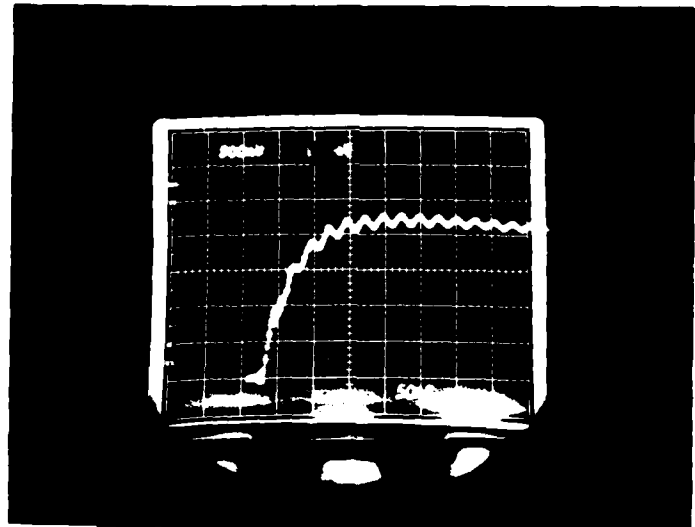
HOT TO COMMON TIED TO GND.

Date	5-31-85
Test Point	111-AL-1/10-A
Amplification	dB
Attenuation	- dB
Horizontal	50 ns/div 1
Vertical	5V (95V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	+600V
Data Link	
Comments:	500



Date	5-31-85
Test Point	112-AL-1/10-Ø
Amplification	- dB
Attenuation	- dB
Horizontal	20 ns/div 1
Vertical	.5V(140V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	+600V
Data Link	

Comments: ARCHER 488  
COMMON TO GND



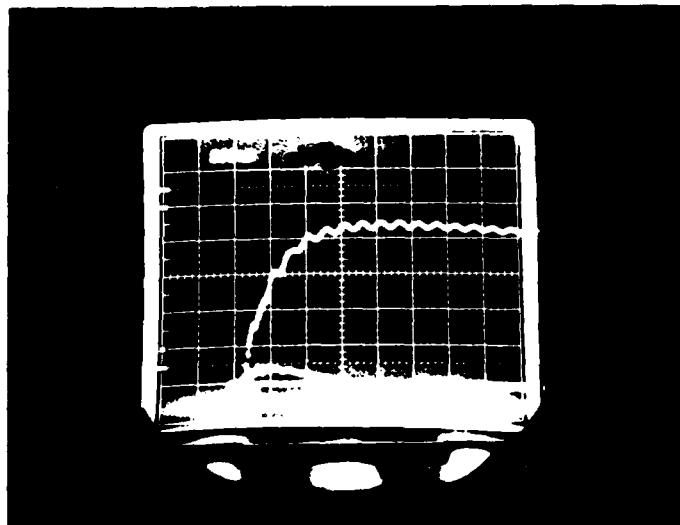
488

SCOPE DIN NOT TRIGGER ON TEST PULSE

Date	5-31-85
Test Point	112R-AL-1/10-Ø
Amplification	dB
Attenuation	dB
Horizontal	20 ns/div 1
Vertical	.5V(140V) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	-600V
Data Link	
Comments:	

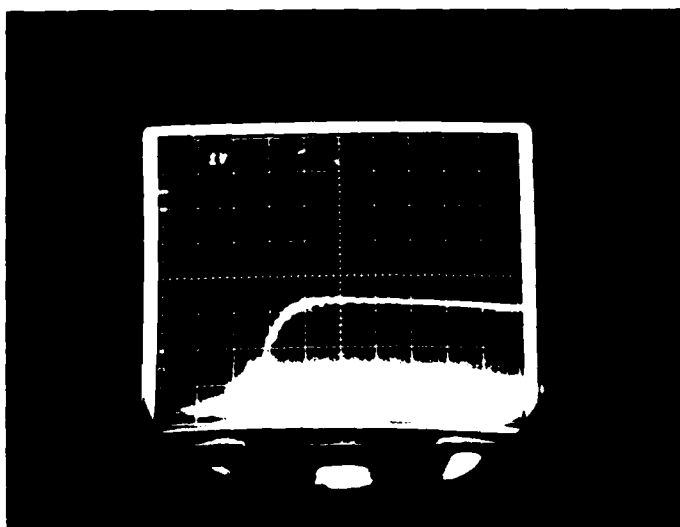


Date	5-31-85		
Test Point	112-AL-1/10-Ø		
Amplification	dB		
Attenuation	dB		
Horizontal	50	ns/div	1
Vertical	.5 (140V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	+600V		
Data Link			
Comments:	493		



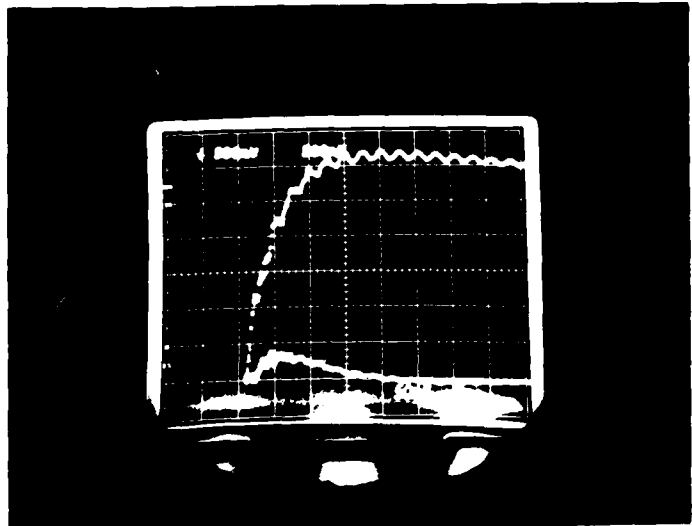
ARCHER  
"HOT TO COMMON"

Date	5-31-85		
Test Point			
Amplification	dB		
Attenuation	20	dB	
Horizontal	50	ns/div	1
Vertical	1V (1900V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulse Level	+4500		
Data Link			
Comments:	494		



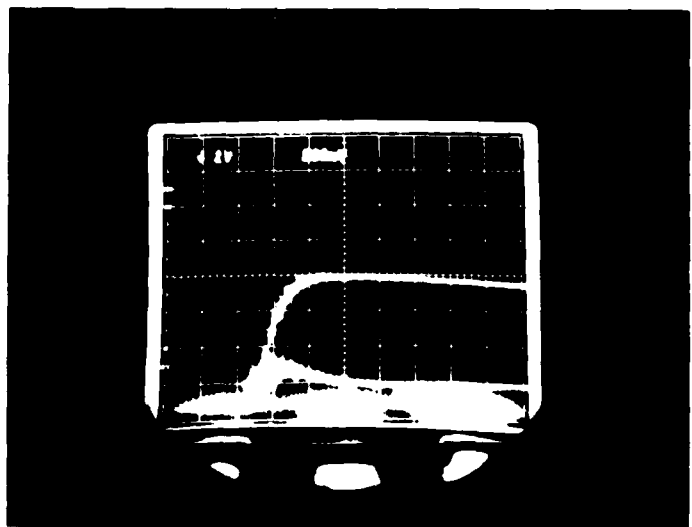
ARCHER  
"HOT TO COMMON"

Date 5-31-85  
 Test Point 112R-AL-1/10-Ø  
 Amplification dB  
 Attenuation — dB  
 Horizontal 50 ns/div 1  
 Vertical .5V (95V) ~~mV~~/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level -600V  
 Data Link  
 Comments: 502  
ARCHER



HOT TO COMMON

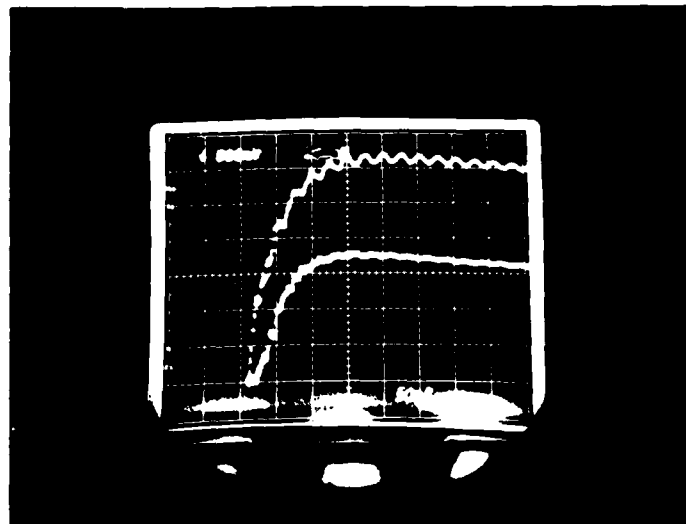
Date 5-31-85  
 Test Point 112R-CL-1/10-Ø  
 Amplification dB  
 Attenuation 20 dB  
 Horizontal 50 ns/div 1  
 Vertical 1V (110V) ~~mV~~/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulsar Level -4500V  
 Data Link  
 Comments: 503



"HOT TO COMMON"

Date	5-31-85		
Test Point	112R - AL-1/10 - Ø		
Amplification	dB		
Attenuation	dB		
Horizontal	50	ns/div	1
Vertical	.5V (8V)	mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level	-600 V		
Data Link			
Comments:	502		

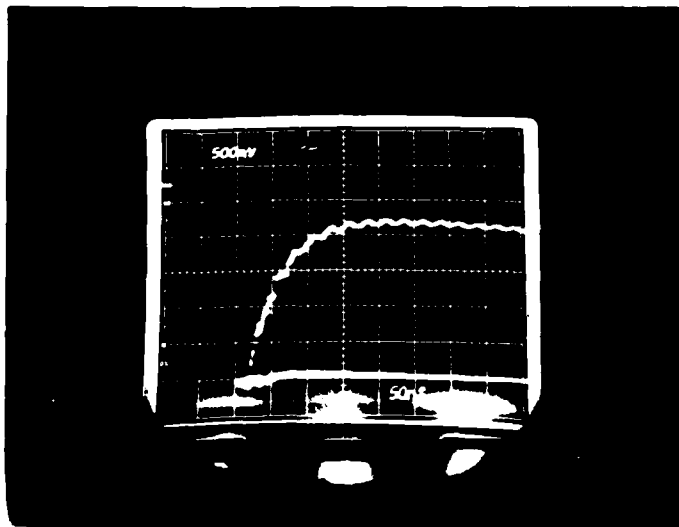
ARCHER  
HOT TO COMMUN



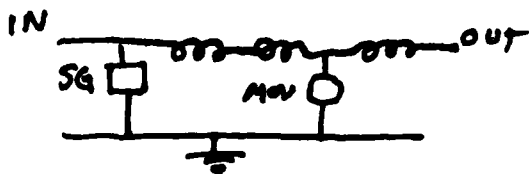
502

Date			
Test Point			
Amplification	dB		
Attenuation	dB		
Horizontal		ns/div	1
Vertical		mV/div	1
Horizontal		ns/div	2
Vertical		ns/div	2
Configuration			
Pulser Level			
Data Link			
Comments:			

Date 5-30-85  
 Test Point 113 -BL-1/10-A  
 Amplification — dB  
 Attenuation — dB  
 Horizontal 50 ns/div 1  
 Vertical .5V(120) ~~mv~~/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulser Level 600V  
 Data Link  
 Comments: 448



448

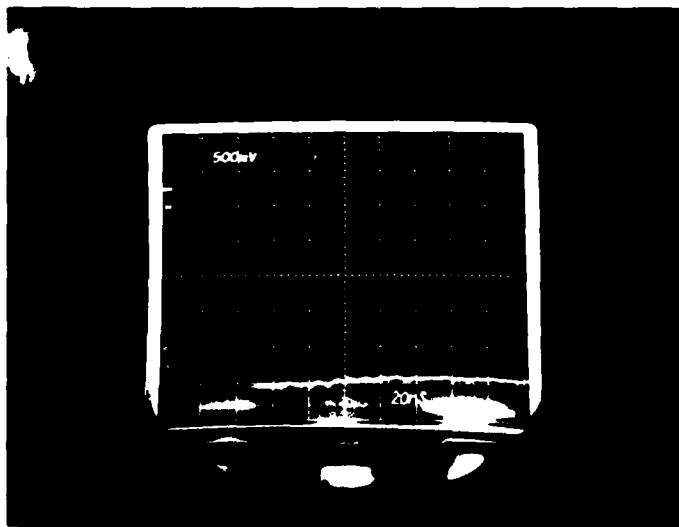


TEST # 113

SG = SIEMENS B1-C145

MOV = GE V82A2

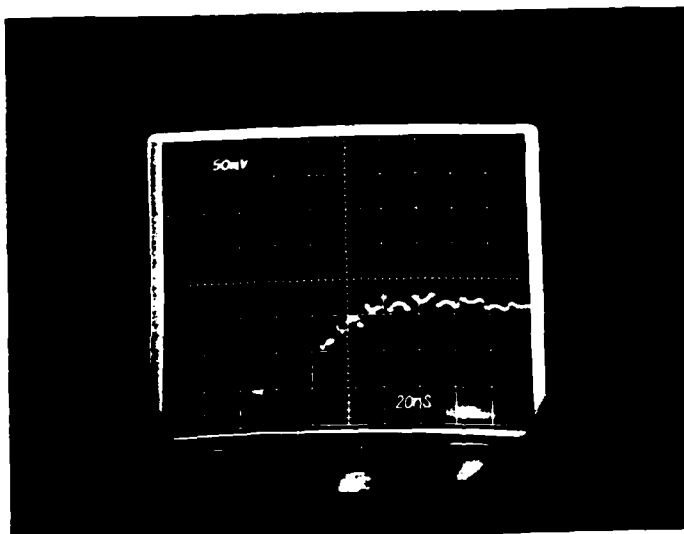
Date 5-30-85  
 Test Point 113 -BL-1/10-A  
 Amplification — dB  
 Attenuation — dB  
 Horizontal 20 ns/div 1  
 Vertical .5V(120) ~~mv~~/div 1  
 Horizontal ns/div 2  
 Vertical ns/div 2  
 Configuration  
 Pulser Level 600V  
 Data Link  
 Comments: 449



449

Date	5-30-85
Test Point	113-BL-1/10-A
Amplification	dB
Attenuation	20 dB
Horizontal	20 ns/div 1
Vertical	.05V(12) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600 V
Data Link	
Comments:	

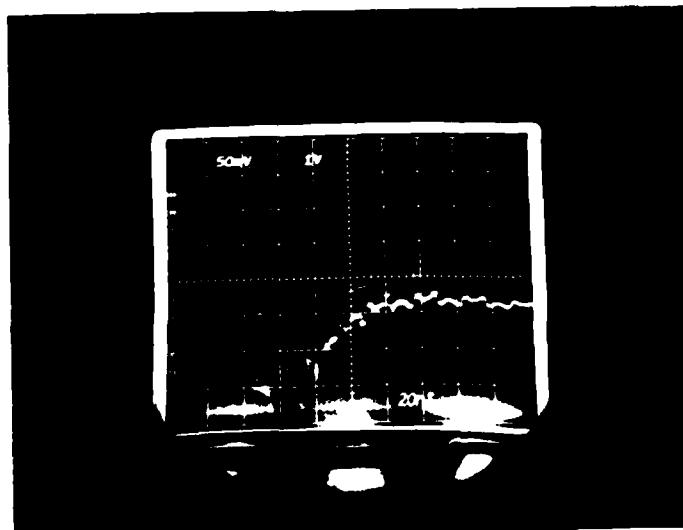
450



450

Date	5-30-85
Test Point	113-BL-1/10-A
Amplification	dB
Attenuation	20 dB
Horizontal	20 ns/div 1
Vertical	.05V(12) mV/div 1
Horizontal	ns/div 2
Vertical	ns/div 2
Configuration	
Pulser Level	600V
Data Link	
Comments:	

451



451

**END**

**FILMED**

**386**

**DTIC**